

UNIVERSITY OF CALIFORNIA
MUSEUM OF VERTEBRATE ZOOLOGY

Vol. 265





Digitized by the Internet Archive
in 2017 with funding from
CLIR

<https://archive.org/details/fieldnotesv154000redo>

Redon, M.

Kings River National Park, Calif
May 20 - June 3, 1942

m. Redon, 1942

filed 6/8/42

Journal

May 20, 1942 - Cedar Grove, S. Fork Kings R., 4600 ft. ^{Calif.} Fresno

Left Berkeley at 5 a.m., Mrs. Grinnell driving her car and with J. Crowley, F. Ogilvie, Mrs. Miller and I as passengers. Dr. Miller and Mr. Harvey Fisher followed in the truck. When we left Berkeley the weather was very clear & nice. We followed highway 99 into Fresno and stopped in the Park for lunch. From Fresno we got on Highway 180 which took us directly into the park. By this time, the weather was very hot. We went first to the Park Headquarters, 7,000 ft. elevation. Here, the weather was so cool as to be almost cold, and some snow remained ^{on the ground} there. We stopped up there while Dr. Miller went to see the Superintendent & Mrs. Grinnell tended to our groceries. We observed some birds. Specifically, we noticed some chipmunks, a Western Tanager, and saw also a Fox Sparrow there. Came down to 6,600 at 5:30 p.m. set traps after dinner.

Seen and heard on trip -

Red-winged Blackbird	Linnet
Brewer Blackbird	Western Meadowlark
Boyle ^{King} Snake Snake	California Jay
Jackrabbit	Brown Towhee
Ground Squirrel	California Quail
Marsh Hawk	Western Mockingbird
Burrowing Owl	Cork Sparrow
Mourning Dove	Weasel
English Sparrow	Barn Swallow

M. Redon, 1942

Journal

Cedar Grove, S. Fork Kings R., Hoopa, Fresno Co., Calif.

May 20, 1942

Black Phoebe

Western Kingbird

Turkey Vulture

American Goldfinch

California Woodpecker

Blackheaded Grosbeak

Ground Squirrel

Pigmy Owl.

Western Tanager

Chipping Sparrow

Chipmunk

Fox Sparrow.

May 21, 1942

Set our traps, 14 in number, East of camp, West of the road which leads to the Bridge. General vicinity is covered with Yellow Pine, and Incense Cedar with *Mangnita* Bushes scattered about and a few Oak, rather small-leaved & stunted looking variety. While setting our traps, ^(May 20) heard & saw some Woodpeckers of undetermined species, & saw some Swifts high above. Some sort of bats were seen flying overhead as we worked (Myotis species?). At about five-thirty in the morning, we went back to our trap line and found an adult male *Peromyscus maniculatus* (1) in the first trap, which had been set under a *Mangnita* bush. The remaining traps were empty. Food had been sprung and their bait was gone.

M. Redon, 1942

Journal

Cedar Grove, S. Fork

May 21, 1942 Kings R. Canyon, Fresno Co., California

Started about 1:15 ^{May 21, 1942} of a warm, but overcast day led by Mr. Dixon. We proceeded up following the trail South out of Cedar Grove. Following trail we saw snow plants & several ligards, coyote droppings, etc. Then we arrived, a little after two thirty p.m. at the ~~North Fork~~ ^{East Fork} of Sheep Creek. Stopped here to watch a Calliope Hummer's nest, ^{which Mr. Miller found.} Came back down the trail & then swinging around North West until we reached the dam at Sheep's Creek. There, we watched some Water Ouzels. Turned and came down the trail to the bench above camp. Watched and listened to several species both on the trail and on the bench above camp. Came back straight down the canyon side, arriving at camp at about 5:20. Set traps after dinner.

Seen on this trip:

1. Calliope Hummingbird (1)
2. Water Ouzel (2)
3. Mountain Chickadee
4. Hermit Warbler
5. Sparrow Hawk (2)
6. Ash-throated Flycatcher (3)
7. Red-shafted Flicker
8. Western Robin
9. Steller Jay
10. Pygmy Nighthawk
11. Western Tanager.

12.

M. Redon, 1942

Journal

Cedar Grove, S. Fork Kings R., 4,600 ft., Fresno Co., Calif.

May 22, 1942

Arose at five thirty and investigated ^{on the} our trap-line. We had set 25 traps East side of the S. Fork of Kings R. Several traps which had been set near the water's edge were empty. I was surprised to see empty, one which had been set near a fallen log; for as I had set the trap I saw something scurry away, possibly a Microtus sp., however, we picked up the traps. Three contained animals, all Peromyscus sp.?

~~Maniculated~~ 2 ♀ and 1 ♂. One ♀ had been attacked by ants and so we did not skin it. Investigated the robin's nest which ^{was} ~~we~~ ^{was} ~~found~~ ^{found} on the East side of the Kings River in the meadow region to the ^{right} ~~left~~ of the road. The ♀ robin was sitting on the nest. 3 eggs in nest.

~~Spent~~ At about 4:10 we started up to look at the Calliope Hummer's nest and to catch Sceloporus on the way. Spent so much time along the way investigating strange birds, etc. that we reached the Calliope Hummer's nest at 5 o'clock thus having left a few minutes to remain there. We came back then, following the trail & observing several birds along the way. No Sceloporus caught. Several seen, these on sunny places with rocks & often sitting on fallen

M. Redon 1942

Journal

Cedar Grove, S. Fork Kings R., 4600ft, Fresno Co., Calif

May 23, 1942

logs. Noticed a streamer of ants at one place where *Sceloporus* seemed fairly thick. Arrived at camp at about a quarter of six. After dinner we set our traps out along the river, East Bank, right-hand side of road (from camp).

Species seen:

~~Sierra~~ Brown Creeper

Sceloporus

Hermit Warbler

Turkey Vulture

Swifts

Red-shafted Flicker

~~Coast~~ Steller Jay

Western Robin -

Calliope hummerbird

M. Redon, 1942

Journal

Cedar Grove, S. Fork Kings R., 4,600 ft. Fresno Co., Calif.

May 23, 1942

Arose at about six o'clock in the morning & investigated the 22 traps which we had set along the East bank of the River. All were empty, one sprung. We sprung the remainder of the traps leaving them so we could ⁱⁿ set them ~~the following~~ evening. Returning to camp with nothing to skin, J. Crowley & I packed ourselves a trail lunch and, equipped with taped noses, field glasses & several rat traps hit the trail at about 8:30. We were at first confused by the number of birds singing, and walked slowly getting good descriptions of birds of which we were not sure. The song of the Calaveras Warbler was a frequently heard one. As we went up the trail, I thought I saw a chipmunk ahead, a few feet beyond the gate ^{on the trail} that leads to the Sheep Creek East Fork where the Calliope Hummer's nest is to be seen. Set a rat trap at the ~~gate~~ ^{chipmunk} territory & then proceeded on up the trail.

M. Redon, 1942

Journal

Cedar Grove, E. Fork Kings River, 4,600 ft. Fresno Co., Calif.

May 23

Somewhat later on up the trail we came to a region of rocky soil, etc. & there I caught a *Sceloporus*. Proceeded on up the trail to the Calliope nest. It was about 10:10, I stopped there & J. Crowley went on up the trail. I stayed & watched the Calliope until about 12 m. & then started up the trail to join J. Crowley for lunch. Walked quite a way without seeing her, so turned back. Caught a *Sceloporus* as I crossed a Sycamore branch of the Creek and arrived back at Calliope nest at 1:00 p.m. Ate lunch. J. Crowley arrived at 1:20 and ate. Proceeded downward together and decided to turn down the Service road instead of following the trail down. Came to a closed camp^(sentinel) and found^{as we were} "wandering" around in it, what appeared to be the site of a Chipping Sparrow's nest, since the male was singing about here & the female flying about with material in her bill. Marked the tree & hoped we would be able to find it the following day. Saw a *Flycatcher* of some sort

M. Redon, 1942

Journal

Cedar Grove, S. Fork Kings R., 4600ft., Fresno Co., Calif.

May 23, 1942

Wood Pewee or Ash-throated (?) and got a very good look at a White-headed Woodpecker. Arrived at camp at about 4:30 p.m. and proceeded to clean up and write a few notes, as well as to look up some of our birds. On arrival at camp, I saw a male Black-headed Grosbeak in an Incense cedar right where we were camped. After dinner, went out & reset our traps. Found that several had been gnawed upon during the day and hoped that that indicated better luck this time. No chipmunk in our trap.

Species seen:

Western Tanager

Calaveras Warbler

Stellar Jay

Brown Creeper (w/ yellow pine)

Chipmunk

Swifts

Sparrow Hawk

Red-shafted Flicker

White-headed Woodpecker

Sceloporus

Cerulean Hummingbird

Mountain Chickadee

Chipping Sparrow

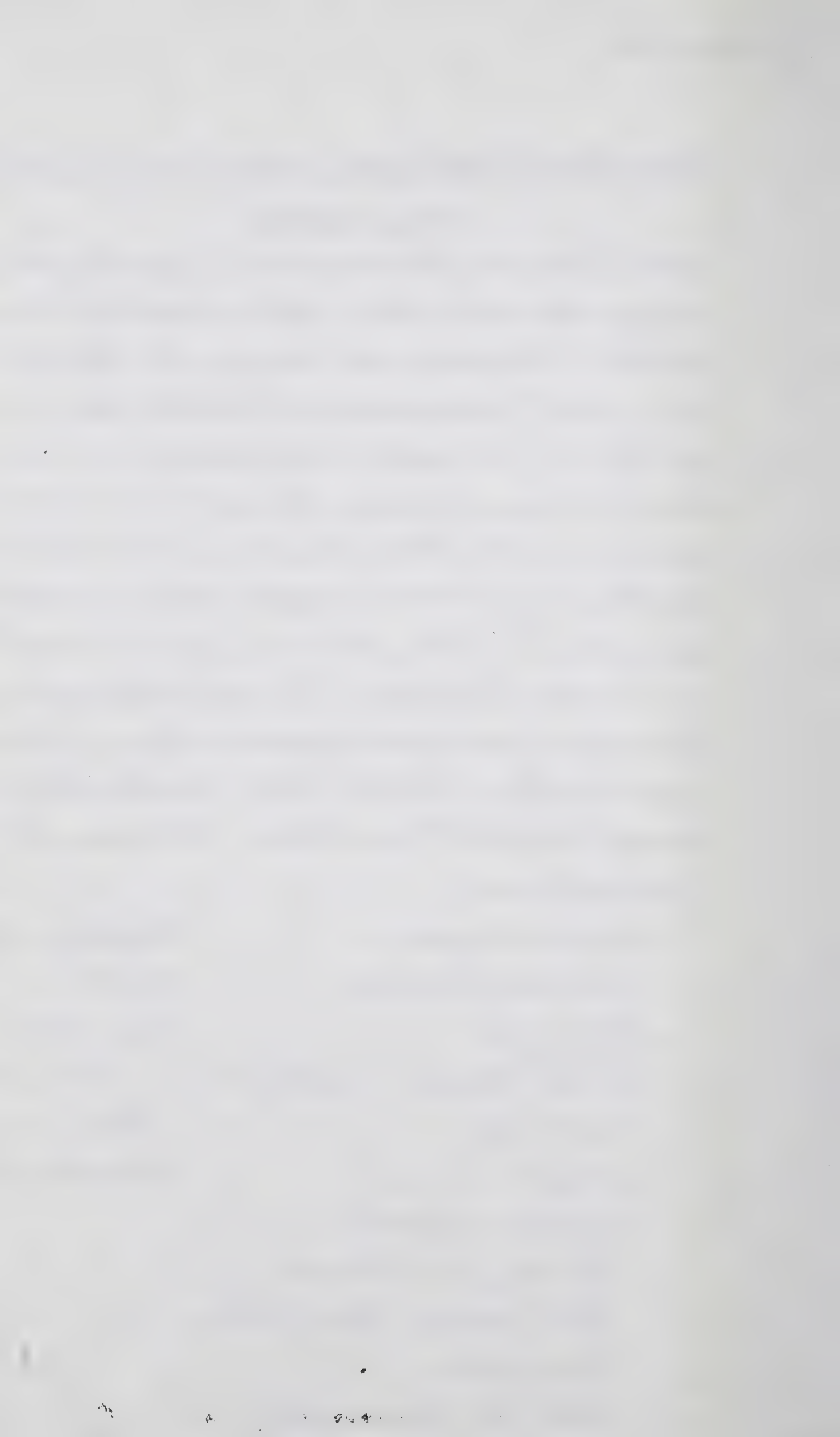
Hawk (?)

Ash-throated

Flycatcher (?)

Black-headed

Grosbeak



M. Redon, 1942

Journal

Cedar Grove, S. Fork Kings R., 4,600 ft., Fresno Co., Calif.

May 24, 1942

We set out at six-thirty to examine our traps. Of the 22 set, one had been sprung and the bait was gone; the others were intact. On the way across to our trap line, we saw a Hairy Woodpecker; the Robin was still sitting on her nest. Our traps had again been set southeast of camp, across the bridge. I spent the morning stuffing a mouse which Mrs. Grinnell had caught in the tent eating our avocados. This mouse was a ♀ containing 6 embryos.

After lunch, at about 1:10, J. Crowley and I set out Sceloporus hunting. The day was very warm & sunny, almost sultry. We walked to the Ranger Station, East of Camp & followed the paved road which leads, eventually, to the Service road. We arrived at the closed camp (Sentinel?) but were unable to find the tree, containing the Chipping Sparrow's nest, which we had marked yesterday. We saw quite a few birds which we attempted to identify with the aid of field glasses. Found a great many Sceloporus about, but the day was warm & they were very active,

m. Pilon, 1942

Journal

Cedar Grove 5 Fork Kings R. 4,600 ft, Fresno Co, Calif

May 24, 1942

so had difficulty when we tried to catch them. Kept walking up the paved road and finally we got to a *Sceloporus paradise*; many small rocks & stones; rotting logs; hot sun; and gnats & ants galore.

Many small *Sceloporus* rushing about madly - also large ones which seemed to keep out of sight now. J. Crowley caught seven; I caught two very, very tiny ones. We walked back and reached camp at about 5:55. Did not set traps after dinner; for we (Josephine Crowley & I) are planning to hike up to the Calliope again tomorrow morning -

Species seen included:

White-headed Woodpecker

Mountain Chickadee

Chipping Sparrow

Western Tanager

Stellar Jay

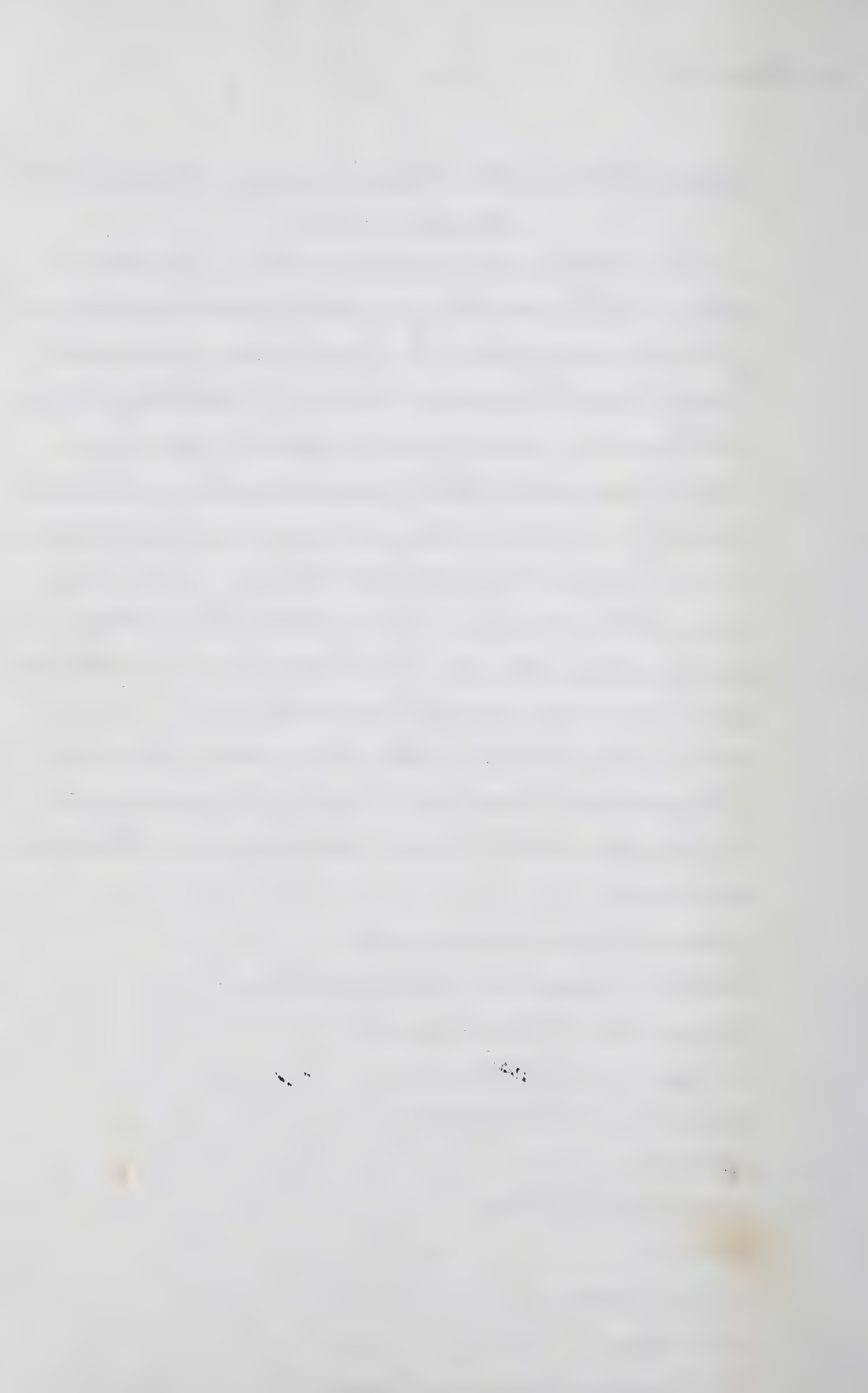
Western Robin

Coyote

Sceloporus

Warbling Vireo (?)

Calaveras Warbler (heard)



M. Redon, 1942

Journal

Cedar Grove, S Fork Kings R, 4,600 ft, Fresno Co, Calif.

May 25, 1942

Got up at about 6:15; had set no traps so got breakfast and at about 6:50 J. Crowley and I left together for the Calliope nest. On the way up, we took the rd road to its end & then got on the trail, we heard ^aTanager, Calaveras Warbler, Swifts, Jays and Chipping Sparrows, not to mention a Robin. We reached the Calliope's nest at 7:35. I remained there, while J. Crowley proceeded on up the trail. Sat and watched the Calliope for 1 1/2 hrs. Then I was so sold I had to go up into the sun for a while; tried to catch some lizards of which there were dozens all over, but failed miserably. Came back alone via the trail & the ~~same~~ ^{old} road. Saw Hermit Warbler & Tanager, 2 males fighting and 1 ♀ (?) sitting by. Also saw a White-headed Woodpecker, ♂ - Reached camp at about 12 M. Saw Prairie Falcon in camp.

Species

Birds seen in morning:

1. Western Tanager
2. Chipping Sparrow
3. Steller Jay
4. Calaveras Warbler
5. White-throated Swift
6. White-headed Woodpecker
7. Sceloporus

M. Redon, 1942

Journal

Cedar Grove, S. Fork Kings R., 4.6 mi. fr. Fresno Co., Ca.

May 25, 1942

- 8 ~~th~~. Hermit Warbler 13 ~~th~~. Western Robin
9 ~~th~~. Wood Pewee
10 ~~th~~. Chipmunk
11 ~~th~~. Sceloporus sp.
12 ~~th~~. Prairie Falcon

May 25, 1942

Left camp a little after 1 p.m. and drove down to the Ranger station. All five girls, F. Ogilvie, J. Crowley, J. Runk, J. De May who was driving and I were present. We picked up Mr. Dixon and drove up to the Kings River Falls region. We got out and proceeded about three miles up the trail to the ^WJunalt Meadows. On the way up, Mr. Dixon pointed out to us all sorts of interesting things. We saw ^{marked} tracks of deer pawing, a doe ran by us, we saw the sap of these plants Artemisia tridentata; Wood Violets were present; we heard Cassin Vireos, Chipping Sparrow, Jays, Swifts. Caught an Alligator Lizard, a Harter Snake & several Sceloporus occidentalis (3). When we arrived at Junalt Meadows we heard several varieties of birds; Red-wing Blackbirds, Humming

M. Redon, 1942

Journal

Cedar Grove S. Fork Kings R., 4,600 ft. Fresno Co., Calif

May 25, 1942

(Allen)
birds of some sort & Calaveras Warblers.
Finches of some sort could also be heard.
We set our traps around the Zuma
Meadows. The land is very swampy
and abounds in Cat tails, horse-
~~tail~~^{tail} & various other types of marsh
growth. We divided up, setting our
traps throughout the meadow, and
I was setting mine on the East(?) side
along the willows. As we worked
thru the water setting traps, we,
naturally, put up ^{red} markers on the
willow boughs which leaned over
the water. I was somewhat surprised
to see a hummingbird (Allen?) going
from red marker to red marker after
the fashion of a Hummingbird
going from fuchsia to fuchsia. I think
that here we have some evidence indi-
cating that the Hummer depends a
great deal on his sight & color vision
for his food. Our traps set at last.
We arrived, very wet & sorry looking
specimens of humanity, onto Oleylaw
& retraced, rather rapidly, the trail

M. Redon, 1942

Journal

Cedar Grove, S. Fork Kings R., 4,600 ft., Fresno Co., Calif.

May 25, 1942

back to the car. We stopped, however, long enough to set 8 rat traps at the entrances to Woodrat nests. We arrived home (camp) at 6:30; rain was falling during the last leg of our trip.

Species seen:

- 1 Cassin's Vireo
- 2 Townsend Solitaire
- 3 Chipping Sparrow
- 4 California Mockers
- 5 Alligator Lizard
- 6 Sceloporus sp.
- 7 Garter Snake
- 8 Redwing Blackbird
- 9 Steller Jay
- all ¹⁰ Hummingbird (?)
- 11 Finches (?)
- 12 Calaveras Warbler
- 13 Flycatcher (?)

Sugar Pine
Yellow Pine
Miner's Lettuce
Artemisia ~~tridentata~~
Wood Violet
Sun Flowers
Thimble berries

M. Redon, 1942

Journal

Cedar Grove, S. Fork Kings R., 4,600 ft. Fresno Co., Calif.

May
Feb. 26, 1942

Got up at seven-thirty this morning since our traps were set at junco meadows & we were going back with Mr. Dixon. A visit by a bear had made our night eventful. Mr. Dixon came up at about eight and decided that we should wait until after nine to see how the weather would turn out. Some time after nine a.m., we set off leaving Mrs. Gunnell at camp. We investigated the light wood-rat traps set not far from where the car was parked, but nothing had been caught. Two of the traps had been sprung. Proceeding further we heard various species of birds, etc. Arriving at the meadows, we each set to work on our respective trap lines. Mine were set along the edges of the willows, and investigation revealed that of 23 traps set, 3 had been sprung. Nothing was caught. One member of the party found a Solmie Warbler in a trap, and another, a *Thomomys* prob. species *leucis*, and a

M. Redon, 1942

Journal

Cedar Grove, S. Fork Kings R., 4,600 ft. Fresno Co., Cal.

May 26, 1942

Microtus. Mr. Dixon shot down a ~~Ciliated~~ ^{Pileolated} Warbler, and a Wright (?) Flycatcher on the way to the Meadows. While there, he collected a Song Sparrow. We sat and ate lunch at 10 o'clock. At 2, we were given an hour to wander at our leisure. Most of the girls crossed the ~~Running River~~ bridge and chased lizards. I, having no lizard noose, watched birds. I noticed Purple Finches, Wood Pewees, Chipping Sparrow, Western Robins. At three, we all met ~~at~~ near the bridge and set out for the car. Arrived in camp at about 4:30, and proceeded to clean up & write some notes.

Species seen:

Black-headed Grosbeak

Cassin Vireo

Steller Jay

Wright? Flycatcher

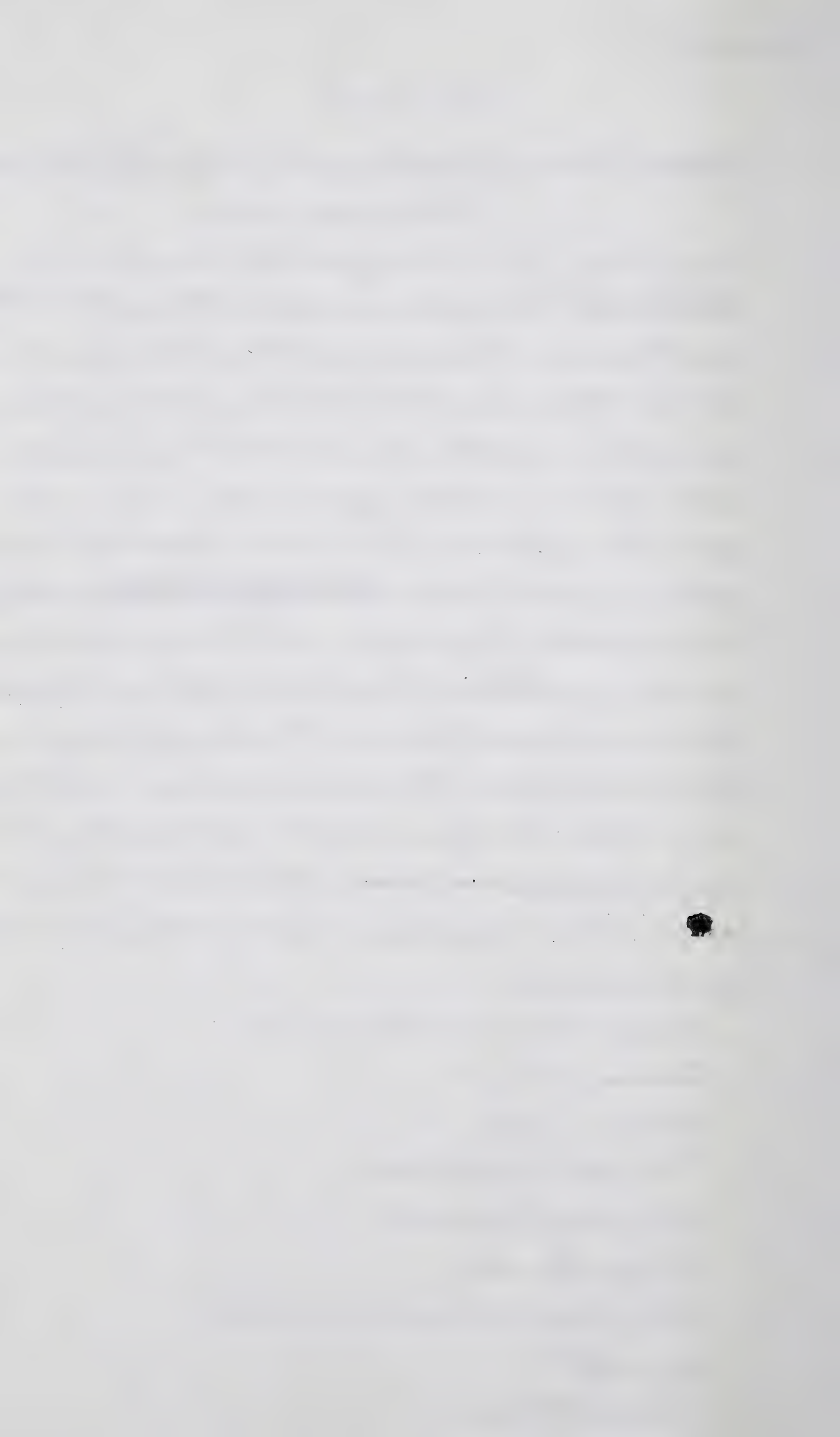
Chipping Sparrow

Oregon Junco

Pileolated Warbler (shot)

Sweet

Purple Finch



m. Redon, 1942

Journal

Cedar Grove, S. Fork Kings R., Kings Canyon, Fresno Co., Calif. 4,600 ft.

May 26, 1942

Wood Pewee

Mt. Chickadee

Chickadee

Bushy Ground Squirrel

White-crowned Sparrow

Western Tanager

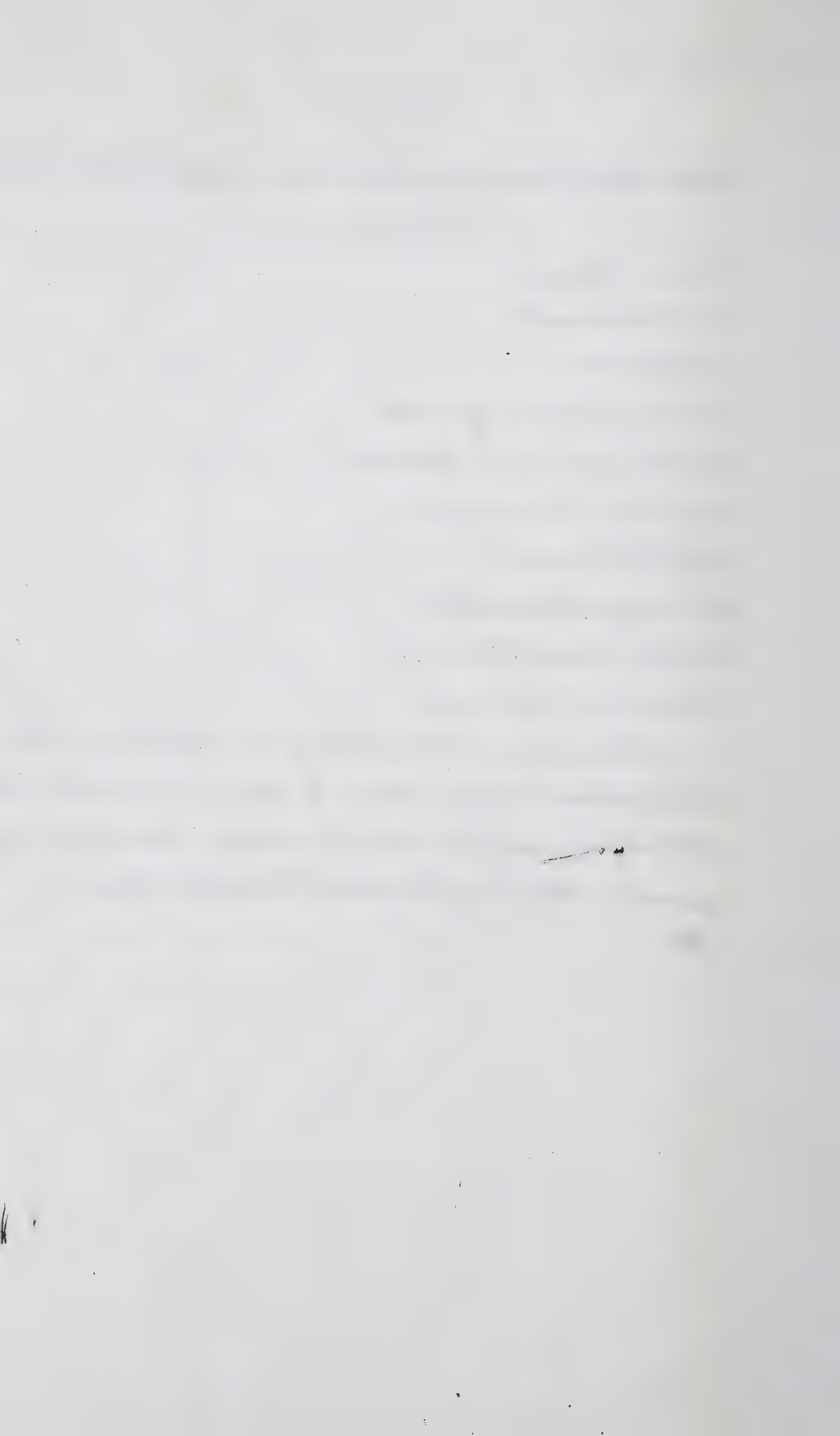
^{Brown}
~~Acorn~~ Creeper

Redwinged Blackbird

White-throated Swift

Western Lark

It was interesting to notice that the marsh-land seemed to house insects which attracted swifts which were swooping and diving above the wet land.



M. Redon, 1942

Journal

Cedar Grove, S. Fork Kings R., 4,600 ft., Fresno Co., Calif.

May 27, 1942

Got up at six a.m. and left for Zumwalt at seven^{thirty} a.m. with Mr. Dixon. The morning was unusually chilly and we feared snow. On our way up to Zumwalt we heard several species of birds, mostly the same that we had heard before. On arriving at Zumwalt, we proceeded immediately to pick up our traps. In my fourth trap I found a Song Sparrow. It was caught by its legs & still alive, in good condition. The remainder of my traps were all empty. J. Crowley found one *Peromyscus* and Mr. Dixon shot one female Blackbird, one Western Flycatcher^(?), one Song Sparrow and one Purple Finch. Mr. Dixon had caught a Garter Snake in his trap which he gave me in exchange for the Song Sparrow (to save the Sparrow for posterity & from my skinning). I caught one small *Sceloporus* on the way back & left my jacket along the trail. We arrived at camp at about 12:30 & after lunch (2 p.m.?) we (Dor De May & I) went back up in order to see if I could find my jacket. She waited in the car while I

m. Redon 1902

Journal

Cedar Grove, 3. Fork Kings R., 4,600 ft., Fresno Co., Calif.

May 27, 1942

followed the trail back just beyond the Roaring River Falls. On the way I caught one Sceloporus which I safely tucked into my bag. I caught another & was surprised to see him turn & snap at me. Investigation showed that he had four ticks in back of his ~~left~~ left ear & 3 (buried deeper) in back of his right ear. I wanted to get the ticks out without breaking them & so did not put him into the bag. The result was that I lost both lizard & ticks.

Got back to the cave at 3:40 p.m. & came straight back to camp.

After dinner Mr. Orion took us down to the Hotel Creek region where J. Crowley & I set 21 traps. On the way down, I stopped & found the Robin still sitting on her nest. We went to the ^{Pack station} ~~home corral~~ & met a family of people who were temporarily in charge there. Came back to camp at 8:00 p.m. or so and then fixed ligands & wrote notes for a while.

Species seen:

- | | |
|-------------------------------|----------------------------|
| 1. Gray Squirrel | 6. Violet-green Swallow |
| 2. Purple Finch | 7. Calaveras Warbler |
| 3. Chimney Sparrow | 8. Cassin Vireo |
| 4. Ground Squirrel | 9. Western Tanager |
| 5. Swift | 10. Black-chested Grosbeak |

M. Redon 1942

Journal

Cedar Grove S. Tak Kings R. 4, 600 ft, Fresno Co., Calif.

May 28, 1942

Arose a little after six. While breakfasting saw doe about 100 yds. from breakfast table. Went off to ~~set~~ see our trap line. No one had anything but M. Dixon. He had caught one *Peromyscus*. Ida and I returned together & revealed a Chickadee which was digging near a stone. He would dig a second then run up on the stone ^{to watch}. This process was repeated several times until he ^{for danger} saw us and scatted. We saw the Robin on her nest still, and several Water Angels down by the bridge. Later on Ida showed me the nest (A) under the bridge. Back at camp, we packed trail lunches & proceeded (Graphine Crowley, Ida, M. Dixon and I) up the trail starting at about 10:10. We went to the Sheep Creek Camp and watched the Water Angels for a few minutes, then we proceeded up the trail to the Calliope nest where I left the others. I spent part of the a.m. hunting around for plants which might serve as hummer food but without success. I saw a Golden Eagle up there. Ida & I had lunch. The Dixon came up & took a picture of the Calliope. At about 2 I was left alone & I spent the time until 4:30 watching the bird closely. She was feeding her young then, I discovered.

M. Peterson, 1942

Journal

Cedar Grove, S. Fork Kings R., 4,600 ft. Fresno Co. Calif.

May 28, 1942

Out to camp at 5:45; had dinner with the
Elisons & then came home and wrote notes.

Species seen:

Calaveras Warbler

Western Robin

Californian Mule Deer (and tracks)

Sceloporus

White-headed Woodpecker

Stellar Jay

Calliope Hummingbird

Water Ouzel

Western Tanager

Golden Eagle

Wood Pewee

Chickadee

(Hermit Warbler ?)

Oregon Junco

Weather was cold morning & up until
noon. After that it was fairly warm,
in the sun, but still windy.

M. Redon, 1942

Journal

Cedar Grove, 4,600 ft., S. Fork Kings R., Fresno Co., Calif.

May 29, 1942

We arose at about 5:35 & J. Crawley & I proceeded immediately to our trapline - near the end of Hotel Creek. We found one Peromyscus (leylii?) which had been caught in a trap ~~can~~ at the edge of a fallen log, about 10 ft. from the foot of the ~~bed~~ slope. Two of our traps had been sprung; the remaining 17 were intact & we left them all, resetting those which had been sprung.

We saw a California Mule Deer crossing the road, ^{while} on our way up to our traps. On the way back, we saw Western Tanager, ♂ and ♀ and stopped at the Robin's nest. She was still sitting.

After breakfast, Mr. Dixon came up, and, at about 8 a. m. we left for Lookout Peak, provided with trail lunches. We followed the old trail up, finding that this went up much more directly than the new trail. As we reached the snow, we heard Nuttall Flycatcher, Pileated Woodpecker and Mr. Quail. Mr. Dixon showed us a Pine Tree from which the ground had picked the more tender shoots, leaving

M. Dixon, 1942

Journal

Cedar Grove, S Fork King R. 4,600 ft. Fresno Co., Calif.

May 29, 1942

^{lower branches} it, ^{practically} stripped bare. At Summit Meadow, from which much of the snow was melted so that it was quite swampy & marshy, we saw a ^{Red} ~~Blue~~-breasted Sapsucker, a small flycatcher sp.?, and heard frogs (Hyla?). From Summit Meadow we tramped up Lookout Peak which we scaled, arriving at the top at 12:30 p.m. From there we saw a Clarke Nutcracker, a strikingly colored brown, black & white bird.

We returned by means of numerous deer trails, fighting our way thru snow, scrubbery, and sliding down slippery pine-needle covered & gravelly slopes until we reached the new trail. On the way down, Mr. Dixon showed us some trees which had been marked by bears, i.e. the bears stood on their hind feet & gnawed off the bark; he remarked that the bears seemed to like the Incense Cedars for this purpose.

M. Redon, 1942

Journal

Cedar Grove, 9,600 ft, S. Fork Kings R., Fresno Co., Calif.

May 29, 1942

As we arrived higher up, we saw Snow Bushes (?), and at Summit Meadow we saw Lodgepole Pine (indicator species for Boreal forest) and some White wood violets. We also heard a ^{Mittell} ~~Pileated~~ Flycatcher giving a call which Mr. Dixon says, insists "^{what perves' you?} ~~you perves me~~ +)".

At 3:55 we arrived at the telescope rest and I stayed while the rest proceeded to camp. At 4:30, I started back to camp. On arrival cleaned up, ate dinner, wrote notes, & prepared for bed.

Species seen:

California Mule Deer

Western Robin

Western Tanager

Peromyscus boylii?

Calaveras Warbler

Oregon Junco

White-throated Swift

Mittell Flycatcher

Hermit Warbler

^{Brown} ~~Scrub~~ Creeper

Fox Sparrow

~~Pileated~~ Woodpecker

Mt. Chickadee

Ground Squirrel

Mittell Flycatcher

Mountain Quail (heard)

Red-breasted Sapsucker

Hyla (?)

Stellar Jay

Black-headed Grosbeak -

(Pair in camp)

Calliope Hummingbird

Clark Nutcracker

M. Redon, 1942

Journal

Cedar Grove, 4 mi. S. Fork Kings R., Fresno Co., Calif.

May 30, 1942

Arose fairly late. Weather = chilly, not so cold as May 29 which was freezing in the morning. Crawling & I went & picked up traps which had been left along slope where Hotel Creek joins S. Fork. In all - 3 traps sprung.

Fixed up trail lunch & arrived at Calliope nest at about 10:55. Watched Calliope until about 2:20. Came back down and looked in on Robin. Mother & father flying around clapping desperately at nest tree & tree about 20 yds. away. Young = in nest with fairly long down - Feathers just clearly visible.

Company for dinner - I did not set traps - intending to leave early in the a.m. to see Calliope.

Species seen:

M. Chickadee

Stellar Jay

W. Robin

C. Warbler

White Throated Swift

Gray Squirrel

Brown Squirrel

Oregon Junco


Sceloporus graciosus.

M. Redon, 1942

Journal

Cedar Grove, 4,600 ft., S. Fork Kings R., Fresno Co., Calif.

May 31, 1942

We slept late this morning. The other girls ^{had} set traps & went to them in the morning; after breakfast I made my way up to the Calliope nest, stopping on the way up to look at the robins. With the use of the mirror, I saw the ~~three~~ young robins lying in a peculiarly triangular position  a. As I stuck my mirror above the nest, the young robin (a) stuck up his neck and opened his mouth wide. When nothing ^{was} given to him, his neck fell back limply in its previous position. The ♀ robin was nowhere in sight. The ♂ began flying ^{about} & twittering worriedly at my investigations. I followed the trail to the Calliope nest which I reached at about 10 a.m. Then, I remained at the nest until two p.m.. I returned to camp and stayed there until 4:00 p.m. I returned up the trail & arrived at the Calliope nest at 4:30. F. Ogilvie, R. Paulson, and J. Ruszick came up to see the nest. All four of us left together for camp at about 6 o'clock.

M. Redon, 1942

Journal

Cedar Grove, 4,600 ft., S. Fork Kings R., Fresno Co., Calif

May 31, 1942

Species seen:

Chipping Sparrow

Western Robin

Calaveras Warbler

Steller Jay

Purple Finch (California?)

Red-shafted Flicker

Sceloporus

California Mule Deer

Chickadee.

Gray Squirrel

June 1, 1942

Up at 7:15. Helped do dishes, etc. Lonnie (F. Ogilvie) + R. Paulson left and after ward, 9:50, Mrs. Gunnell + I came up the trail to the Calliope nest. She picked some ferns etc. + then went back down. I stayed at the nest until about 1:30. While there I saw several Chickadees, some Sceloporus, and returned to camp at about two. On the way down, on the trail bet. the New Trail + the Water Angel trail (trail to Sheep Creek Dam), I came across a rattlesnake; my reason for deciding to come back to camp, rather than to go see the Water Angel.

M. Reder, 1942

Journal

Cedar Grove, 4,600ft., S. Fork Kings R., Fresno Co. Calif

June 1, 1942

Stayed in camp until about 4:00 p.m.
and then J. Rousick & I went to the bridge
to see if we could find the nest of a Calliope
which Mrs. Gunnell reported having seen
flying around there. The presence of a nest
seemed rather likely chiefly because
of the presence of the bird at that time of
year & ^{because of the fact} that the habitat strongly suggested
that occupied by the bird I have been watching
up the trail near Sheep Creek Falls. There
was rather near, oak & alders present etc.
We found nothing, however. We went to
look at the robin's nest. Mother = off nest.
Father nearby on other side of nest tree.
We did not disturb them. In camp at 6:00
species seen:

Gray Squirrel

Chickadee

Western Tanager

Purple Finch

Ground Squirrel

Golden Eagle

Western Flycatcher (?)

Wood Pewee

Water Ouzel

Calliope Hummingbird

Pacific (?) Rattlesnake

Sceloporus graciosus

Calaveras Warbler

White-throated Swift

M. Redon, 1942

Journal

Cedar Grove, 4,600 ft., S. Fork Kings R., Fresno Co., Calif.

June 2, 1942

Left camp at about 7:35 after having done dishes. Stopped at Robin's nest. Matches on nest & farther nearly in ^{Pine(?)} Fir(?) tree about 10 yds. from nest. Came on trail straight up to Calliope nest. Saw numerous Chickarees in rockpile near bridge; saw also ground squirrels pushing across road. On trail startled a Chialice which pushed away chattering excitedly. Also came across a deer which heard me stamping up the trail and bounded gracefully away. ^{Calaveras} Saw Swifts & heard numerous warblers.

Arrived at Calliope nest at about 5 min. of 8 and stayed until about 10:30. At that time H. Fisher & R. Stöcker came up the trail. We proceeded on up together until we were well beyond the limits of Kings Canyon Nat'l Park & within those of Sequoia Nat'l Park. We proceeded in a leisurely fashion & stopped to watch birds, etc. along the way. H. Fisher shot one junco (via slingshot) & the two caught several Sceloporus graciosus.

M. Rutter 1942

Journal

Cedar Grove, 4,600 ft., S. Fork Kings R. Fresno Co., Calif.

June 2, 1942

We went down to the dam & ~~collected~~ ^{saw} Water Ouzel & then cut down the canyon side to arrive in camp at about 4:00 p.m. I stayed in camp while L. De May, R. Storer, H. Fisher & Mrs. Grinnell took the car to explore the roads, and J. Crowley & J. Russick went to watch the Ouzels. The day was overcast although when we got below the Calliope nest, we were quite warm.

Species seen:

Chickadee

Gray Squirrel

Chipmunk

Ground Squirrel

Californian Mule Deer

White-throated Swift

Wood Pewee

Hammond or Wright Flycatcher

Nuttall Flycatcher

White-headed Woodpecker

Hairy Woodpecker

Stellar Jay

Western Robin

~~Turner~~ ^{Brown} Creeper

Sceloporus

Pigmy Nuthatch

Mt. Chickadee

Golden Eagle

Pileolated Warbler

Audubon Warbler

Black-throated Gray

Calaveras Warbler

^{Yosemite} " Grouse (heard)

Red-breasted Nuthatch

Violet-green Swallow

~~Nuttall Flycatcher~~

Sparrow Hawk

Calliope Hummingbird

Water Ouzel

M. Redon, 1942

Journal ^{6700ft}
Gen. Grant Park, Camp Azalea, Fresno Co., Calif.
Cedar Grove, S. Fork Kings R., 4,600ft, Fresno Co. California

June 3, 1942

Arose at 5:30 a.m. & went to get our traps which had been set about a mile west of Roaring River among manzanita & sagebrush. Of 20 traps, there were 3 which contained animals. 1 adult male Peromyscus maniculatus under a manzanita; 1 adult ♀ Peromyscus maniculatus under an Artemisia, she contained 5 embryos which averaged about 10 mm. in length; and one immature Peromyscus maniculatus at the edge of a rotten log. This specimen had a broken skull and so was not put up. We packed up & left camp at about 11:00 a.m. ^{Lunched at Hume Lake} We drove up to Gen. Grant Park Headquarters, stopping for lunch at Hume Lake Camp ground. Then we stopped at Park Headquarters long enough to make a few purchases. We then proceeded to Camp Azalea. ~~and then~~ Stopping there, we went for a walk to the General Grant tree and followed the trail for a mile or so. We came back to camp; had dinner, and sat around the fire writing notes.

M. Reder, 1942

Journal
General Grant Park, Camp Cuzco, ^{6700ft} Fresno Co, Calif.
~~Cedar Grove, S. Fork Kings R., 4,600ft. Fresno Co. Calif~~

June 3 -

Species seen:

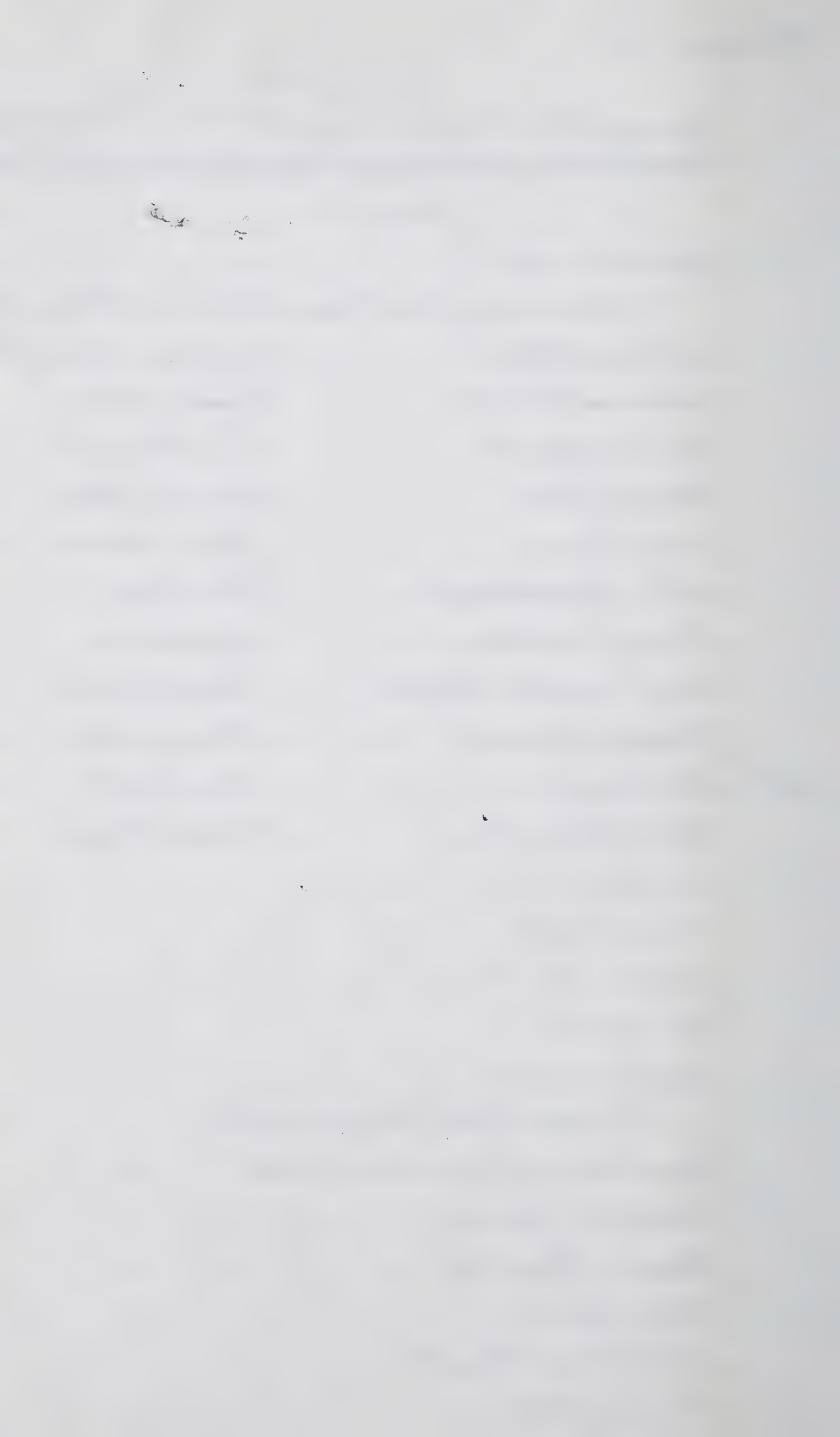
(On route from Cedar Grove to Park Hdq.)

Western Robin	Western Wallflower
Calaveras Warbler	Penstemon
Ground Squirrel	Peanthrust
Mourning dove	Blazing Star
Wood Pewee	Yerba Santa
White-throated Swift	Red Bud
Turkey Vulture	Ceanothus
Black-headed Grosbeak	Rabbit brush
Chipping Sparrow	Mangrovia
^{Greenback} Goldfinch	Shadblow
Muttall Flycatcher	Wild Cherry
Fox Sparrow	
Cassin Finch	
Western Tanager	
Chimney	

Species seen:

(Hume Lake Campground)

Blackheaded Grosbeak (pair)
Cowbird (pairs)
Brewer Blackbird
Wood Pewee
Audubon Warbler
Oregon Junco
Western Robin



M. Redon, 1982

Journal
Gen. Grant Park, Camp Azalea, ^{6700ft} Fresno Co, Calif.
Cedar Grove, S. Fork Kings R, 4600ft, Fresno Co, Calif.

~~January~~
January 3, 1982

Species seen:

(Camp Azalea & vicinity)

Townsend Solitaire

Mountain Chickadee

Wood Pewee

Chipping Sparrow

Fox Sparrow - (nest with 3 eggs in snowbush)

Western Robin (nest with 4 eggs - small yellow pks)

Chipmunk

Chickadee

Calif. Mule Deer

Green-tailed Towhee

Gray Squirrel

Hammond or Wright (?) Flycatcher

Red-breasted Nuthatch

M. Redon, 1942

Journal

San Francisco, San Francisco Co., Calif.

June 4, 1942

Arose at 5:00 a. m. and set out immediately for home after cleaning camp. Left Camp Agaña at 5:30 a. m. Followed Highway 180 until Fresno which we reached at 7:30 a. m. I. He May and J. Crowley were in the former's car. H. Fisher, R. Störck, and J. Russick were in the truck, and Mrs. Grinnell and I were in her car. We all had breakfast in Fresno, and left at 8:00 a. m. J. Crowley and I were in Mrs. Grinnell's car with her going to Berkeley. R. Störck and H. Fisher were in the truck, also going to Berkeley. I. He May & J. Russick were in the former's car, going to Santa Barbara & L.A. We took Highway 99 from Fresno & followed it to Modesto, stopping at Merced for a while to freshen up and change. Followed Highway 132 from Modesto to Vernalis & then Highway 33 to Tracy?. Highway 50 took us into Walnut Creek where we had lunch. From there we took the Fish Ranch Road to Mrs. Grinnell's home, arriving at about 1:45 p. m. We unloaded the car, showered, and J. Crowley and I took the 3:11 Key System train to San Francisco. I arrived home at about 4:30.

M. Redon, 1942

Journal

San Francisco, San Francisco Co, Calif.

June 4, 1942

Species seen:

Western Robin
Stellar Jay
Skunk (smelled)
Wood Pewee
California Jay
California Woodpecker
Raven
Crow
Cottontail
Meadowlark
Shrike
Brewer Blackbird
Linnit
Cliff Swallows
Brush Rabbit
California Quail
Barn Swallow
English Sparrow
Western Kingbird
Cooper Hawk (?)
Mockingbird
Sparrow Hawk
American Egret
Red-wing Blackbird
Marsh Hawk

M. Redon, 1942

Catalogue

Cedar Grove, S. Fork Kings R., 4600 ft., Fresno Co., Calif.

May 21, 1942

1 ♂ Peromyscus maniculatus 150-64-9-17

May 22, 1942

2 ♀ 3emb. x 11 mm. Peromyscus boylii? 201-95-22-20 32.5 gm.

exchange
coll. 3 ♂ Peromyscus boylii (X) 192-98-10-20 26.3 gm.

May 23, 1942

4 Sceloporus graciosus (formalin)

5 Sceloporus graciosus (formalin)

May 24, 1942

6 ♀ 6emb. x 5 mm. Peromyscus maniculatus 155-65-19-15 23.2 gm.

7 Sceloporus graciosus (formalin)

8 Sceloporus graciosus (formalin)

May 27, 1942

9 Sceloporus graciosus (formalin)

10 Sceloporus graciosus (formalin)

11 Garter Snake (formalin)

June 3, 1942

12 ♀ 5emb. x 10 mm. Peromyscus maniculatus 153-63-19-17 22.9 gm.

M. Redon, 1942

Sceloporus graciosus?

Trail @ E. Fork Sheep Creek, Kings Canyon, Fresno Co, Calif

May 23, 1942

4- An Sceloporus caught along trail side in a gravelly, rocky, sunny region overrun with ants & with rotting trunk on the ground. It was caught about 1 ft. from the trunk; 3 ft. from the trail nr. cattle guard

5- Sceloporus graciosus. Caught along trail above Sheep Creek Falls. Region of granite rock. In trees for about 15 ft. caught about 2 ft. from their stream trickle.

May 24, 1942

6- Sceloporus graciosus. Young lizard caught in patch of blacky land near paved road - Sentinel Camp & old dirt road. Region - sunny, much granite rock & a few rotting logs ^{region} sloping off from road. Somehow, a whole host of small gnats kept arising like a stream from one rotting log. This seemed to support a ~~whole~~ host of Sceloporus, young and old. However, the young were easier to catch

8- Sceloporus graciosus - young lizard
See account under # 7 above.

M. Redon, 1942

Sceloporus graciosus?

Roaring R. Falls, M. Cedar Grove, Kings Canyon, Fresno Co., Calif.

#9 - ^{May 27, 1942} Small, young caught near rock in ground.
Young scurry about, but keep coming out
from shelter and into sight. so that if you
keep after them, they are more easily caught
than the old ones.

#10 - Caught in house, near Roaring R.
Falls. Rocky, sunny, region with some
mangroves.

M. DeLong, 1942

Peromyscus maniculatus

Cedar Grove, S. Fork Kings R., 4600 ft., Fresno Co., Calif.

May 21, 1942

1 ♂ Peromyscus maniculatus 150-64-9-17

Set 14 traps caught 1 Peromyscus ♂.

Trap set under manzanita bush nr. bridge at Cedar Grove Camp. Bush was in open space, no trees or brush closer than 30 ft. Very little grass in surrounding open area; gravelly soil; within 25 ft. of paved road. Manzanita covered space about 8 ft. in diameter. Some dead branches on west side of bush, animal caught in trap on N.E. edge, lit. 2 Callospermophilus beecheyi diggings.

May 24, 1942

6 emb. x 5 mm.

6 ♀ Peromyscus maniculatus 155-65-19-15 23.2 gm.

Caught in camp - in Mrs. Gunnell's tent, had been feeding on avocado in a basket. Caught at about 11:00 p.m.

June 3, 1942

1 mi. W. Roaring R. Falls, Kings Canyon, Fresno Co., Calif.

12 ♀ 5 emb. x 10 mm. Peromyscus maniculatus

153-63-19-17-22.9 gm.

Caught under an artemisia bush. Whole region of Artemisia & manzanita - sandy soil.

1 ♂ caught in same region under a manzanita. Put up by J. Crowley.

1 immature with skull broken - not put up.

M Redon, 1942

Peromyscus boylii?

East of bridge, N. Cedar Grove, ^{S Fork} Kings R., 4600 ft, Fresno Co., Calif.

May 27, 1942

- 2 - ♀ 3 emb x 11 mm. Peromyscus boylii? 201-95-22-20 32.5 gm.
3 ♂ Peromyscus boylii? 192-98-10-20 26.3 gm.

Set 25 traps in region across bridge to left of road; caught 3 Peromyscus boylii?, 2 ♀s, 1 ♂. One female, containing 3 embryos, was caught along the east shore of the creek flowing into the S. Fork of the R. N. bridge. The trap had been set at the bottom of a large granite boulder, just at a crevice. The second ♀, which was not preserved because it had been attacked by ants, was caught in a trap set at the foot of a rotting stump. The ground around was covered with dry pine needles. The ♂ was caught under a log with brush litter and decaying wood around it.

M. Redon, 1942

Calliope Hummingbird

May 21, 1942 - Sheep's Creek, Kings River Canyon, Fresno Co., Calif.

♀ flying around in circles keeping pretty much in same region. Dark streaks on throat; green back. First seen flying into a Golden Oak & between this and a White Fir. Always on the move, resting for a moment on branches then on her way. Suspected nest because of constant activity & staying constantly around the oak. Tree set down from trail & about 15 feet ^{up} from the tree, set in fork of secondary branch about a foot from the edge of the branch & about 3 ft. from main trunk, we saw a nest. Although she hovered constantly about it, she did not go very near at first, merely flying rapidly about, then stopping a 2nd in the air & then alighting for a second on a tip of a branch & again on her way. Finally, she, after Dr. Miller had sighted the nest, went ^{near} & seemed to look into it. Then she grew more confident ~~could~~ ^{didn't} sit a few moments in it, facing us both times. When ^{someone} ~~she~~ came toward the nest she would first fly from the tree to a Douglas fir about 10 feet back on the same side of the trail & then into one directly opposite the tree in ^(across the trail) which the nest was contained. She would then, when someone approached nest directly, fly around region of nest and as soon as intruder ~~disappeared~~ take a circuitous course back to the nest. This contained

Calliope Hummingbird

May 21, 1942 - Sheep Creek, Kings Canyon Nat'l Forest Co., Calif.

2 eggs ^{she would} go into nest after reaching branch where nest located, and zigzagging first to one side and then to the other, working away from the branch ^{& under the branch}. ~~branch~~ ^{until} finally she would circle ^{under} ~~over~~ the limb & enter the nest. In getting into nest she would come under it & then seem to step over the side & neatly settle in it.

Twice I thought she stepped onto the side & then into the cup, resting just a fraction of a second at the edge of it. Nest situated in such a way as to be protected from view by a screen of leaves, and yet the bird sitting on it could look around her. Any movement down the path would send her from the nest. She stayed away only until she thought danger fairly clear & if we stood around long enough, after several false moves in the direction of the nest & then circuitous flight away, she would eventually take her zigzag path to the nest. After we had disturbed her at first, she was still a little cautious & would usually stop a second at the edge of a twig about 2 feet below the nest and a foot or so long. This was a bare twig & she was very conspicuous sitting on it. However, although while there were people around she would stay on the nest only a few seconds at a time, when no

Calliope Hummerbird

May 21, 1942 - Sharp's Creek, Kings R. Canyon, Fresno Co., Calif.

one ^{else} was around, she would stay there pretty consistently. Usually an involuntary movement on my part in chasing flies away sent her from the nest ~~after~~ ^{for} perhaps a minute or two.

After everyone ^{else} was gone, I counted 8 ⁹ minutes as the length of one stay in the nest. She flew to the Douglas Fir in back of her - could not see her after that and returned in about $3/4$ min. stopping a moment on the small limb previously mentioned and after a stop just under the branch, a quick turn ~~over~~ under & over into the nest. Time in nest = 3 min.

Someone's approach frightened her this time. Her return was observed after a great deal of zigzagging & circling. It was remarked that regardless of the side from which the nest was approached she always entered it from the same ~~way~~ side;

that away from the path. This time after her stop on the branch below, she went away to the other side of the branch & this time, approached from the other direction (thus not completing her sweep under & over ^{the limb} to the other side of the nest).

We changed position from one side of the nest to the other & on her return to the nest, she faced in the ~~other~~ ^{opposite} direction ~~this time~~ i.e. faced us.

Then, one of us moved ^{to the other side} and after a little, she entered the nest & faced the direction of the one by whom she had last been frightened.

Calliope Hummingbird

E. Fork

May 21, 1942, Sheep's Creek, King's R. Canyon, Fresno Co., Calif.

We could see that each movement or sound from one of us would cause her to move her head slightly, although she did not constantly move her head from side to side. Indeed, each move^{on her part} was a scarcely perceptible jerk of the head. She was frightened off again & then she returned, perching again on the little branch below the nest, & then flying in again with 2 zigzags. No ♂ in sight at all. Nest seemed protected from sun with over-hanging leaves. Moving notebook back & forth yielded side to side head movement. Also with movement up & down = slight jerk. Off = 32 seconds. On = 30 sec. Then off. Seen in tall, sparsely-leaved ~~oak~~^{alder} behind the ~~oak~~^{tree} in which nest situated & cleaned her bill & preened. Then back to nest, facing us still. Noise from down path & off nest. Then people came to us; she flew back on, watching them, head turned with eye on them. They moved up trail & again she left nest; then she came back, again with head turned & right eye on them; a movement on our part now led to slight head movement. They were out of sight, then a movement by us yielded no movement on her part; her attention was apparently on us now.

May 22, 1942

ca. 5 p.m.

Sitting on nest. Watched ^{she} for about 5 min. Did not move.

Calliope Hummingbird

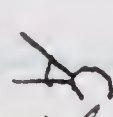
Cedar Grove, S. Fork Kings R., Fresno Co., Calif., 4,600 ft.

May 23, 1942

Arrived at 10:10 to the ~~spot~~^{site} of the hummer's nest. It was impossible to approach without disturbing her. She returned to the nest ~~without~~ in about 5 min., after first flying in a swift circle around the nest tree and then going to the ~~oak~~ larger ^{alder} oak in back of the nest. There, she perched on a branch about 25 ft from the water, sitting about four feet from trunk of tree & wiped her bill by drawing it along the branch and fluttered her wings a few times. Then, she flew to the tree (another oak, this one with leaves just coming out) ^(S. of nest tree & down 4 ft from trail on slope) and sat on a branch about 4 ft from the ground for a second. She flew to the nest tree, finally, first zigzagging under the branch which holds the nest several times & then flying around the tree, and then back to the vicinity of the nest, a few more ziggags & finally into the nest. This time she appeared to fly in, fluttering her wings as she settled there. She sat facing me, i.e. East. I timed her stay as eight min. J. Rossick came up then, and the hummer flew away. Stayed for a few seconds, circling the tree, then settled on a branch in the ^{alder} ~~oak~~ behind her, this time at about the level of the nest, about 35 or 40 ft. above the water & again fluttered her wings & preened, scratched with one foot, ziggaged under the limb & entered (stepped) into the nest. A second or so later she flew off & returned immediately.

Calliope Hummingbird
E. Fork Shing Creek, Kings Canyon, 5500 ft., Fresno Co., Calif.
Cedar Grove, S. Fork Kings R., 4600 ft., Fresno Co., Calif.

May 23, 1942

This time she faced J. Russick who had moved on up the trail. A second or so later she left the nest, flew under the branch & entered the nest, always from the same side. After about 2 min. J. Russick stood up; the hummingbird left and about a minute later was again in the nest. J. Russick moved closer to me; hummer sat with head turned & beak pointing sort of between us, apparently watching us both. Sun now striking nest & hitting bird's breast; neck & head in shade. Hummer sits 8 min. moves, possibly because of a too rusty gesture on my part toward my field glasses. Returns after about 1 1/2 min., this time without zigzagging & ~~not~~ stepping directly into nest from the same side as usual. Sits fairly erect in nest with entire head visible. Beak held often at slight angle  from the horizontal. Sun now no longer hitting nest. ^{Bird} Can be seen to jerk head very slightly with a sudden movement, & quite noticeably after a sudden move apparently from the one of two persons on whom her attention had not been focused.

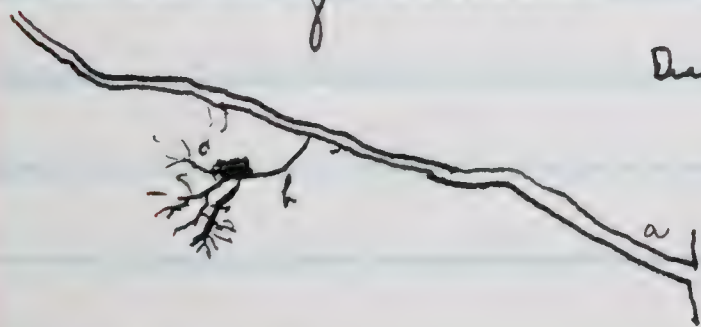


Diagram indicating nest location -

a) Main branch about 15 feet from ground
 tree = on slope + nest = actually above
 1 ft. from path edge.

b) Secondary branch - here glasses were seen
 see that nest = set out, with some fibers
 holding it down. Nest 3 feet
 from trunk - 2 1/2 ft. from end

Ridox, 1942

7

Callipepla squamata

E. Fork Sheep Creek, King Canyon, 5500 ft., Fresno Co., Calif.

Cedar Grove, S Fork, King R., 4600 ft., Fresno Co., Calif.

May 23, 1942

Seen to remain 12 minutes on nest, hardly stirring. Few head movements only indications of movement. Unable to see where she went, but returned in about a minute, this time going directly to nest without zigzagging and facing south. Apparently, this time she left without being frightened and although we were within her line of vision, she did not set herself specifically to watch us; nor did she hesitate in approaching nest as she does when she has been frightened off. Stayed on nest 5 minutes. Flew N, & in circle; perched in oak a few limbs (4 ft) above nest, down below nest & into nest from usual side, directly, no other zigzag - returned 1 1/2 min. Noticed once when I arose, first slow, careful forward movement did not alarm her, but movements upward, which brought me near the nest resulted in her flight. Left once for about 2 minutes (result of my arm movement?) & seen in oak to the N. W. cleaning her bill on her body and on ~~the~~ the branch.

Return at that time included a little hesitation in getting to the branch but once there, she stepped directly into the nest, not actively fluttering her wings this time, but merely adjusting them as she stepped.

Every single move on my part resulted in a little jerk of the head on hers.

Redon, 1942

Calliope Hummingbird

E. Fork Sheep Creek, Kings Canyon, 5500 ft. Fresno Co., Calif.
Cedar Grove, S. Fork Kings R., 7600 ft. Fresno Co., Calif.

May 23, 1942

Changed position to the South East side of tree since I was growing very, very cold. Hummer flew away & came back shortly, with one zigzag under the branch, sat facing the N East, one eye turned on me. From this side, the nest is best ^{concealed} ~~disguised~~ ^{by} a screen of leaves which do not actually hide the nest, but rather serve to disguise it. The bird's gray throat blends beautifully with the grey nest & the ~~a~~ mubby structure of the nest, as well as its inconspicuous grey color make it blend with the leaves. Yesterday, when I came up here, I walked right past the nest & each time one looks for it it is necessary to get one's bearings and start from the trunk before being able to find it. At 11:25 the sun had shifted so as to be concentrated directly upon the nest. Sat on nest for nearly a half-hour. Unfortunately, I was not watching at the beginning of this period & do not know exactly how long she ^{had been} ~~was~~ there (11:15-11:45) Sun shining fully on nest & mother. Back in a few minutes about 1 1/2 minutes).



Redon, 1942

9

Calliope Hummingbird

Bird

E. Fork Sheep Creek, 5500 ft. Fresno County, Calif.

May 25, 1942

Arrived at Calliope nest at 7:35. Bird sitting on nest and apparently undisturbed by our approach. Eggs are obviously not hatched or she would not sit still so long. She is now creeping over toward the nest. I wonder if she will feel free to leave if the sun comes into the nest. It is fairly cold this morning and she shows no desire as yet to move. Cannot help but contrast her appearance & her nest with that of the Robin. The latter's nest is much shallower than the Calliope's, speaking relatively, of course, the robin's head ^{does} not project as far from the nest as the hummer's & ~~it~~ has been seen to keep their beaks at about a $30^{\circ(2)}$ angle with the horizontal. The bird remained on her nest until 7:50, about 15 minutes & then flew off for about a minute. Her return was made with a stop on a limb on the east side of the tree, about 4 feet below the nest. She sat on the limb for several seconds, at the extreme tip and wove her back to me. She straightened her wings a little, and then swooped directly around, under

Redon, 1942

7
10

Calliscope Hummingbird
^{Kings Canyon}
E. Fork, Sheep Creek, _____ ft., Fresno County, Calif

May 25, 1942

the branch which holds the nest, to the west side of the nest and stopped in as was her custom, her wings still fluttering, her feet just touching the edge ^{on the limb}. She wiggled her tail which stuck up from the side of the nest this time (had not noticed this before) several times as she settled down. Stayed on nest about 9 min. I was writing where she left and so did not see her direction of flight. I shall try to find where she goes upon leaving the nest, probably for food, but where?

Remained away about 3 min.

Took a few more precautions about entering nest because I moved while she was off the nest; in fact, I suspect that my moving kept her off the nest longer than she might normally have stayed. She faced me on her return. It is very obvious that she watches every move I make; while she was gone I climbed a little way up the slope on the opposite side of the nest trail to see if I could see into the nest. I decided that I could not & she came back, so I slithered carefully down so as not to disturb her.

Redon, 1942

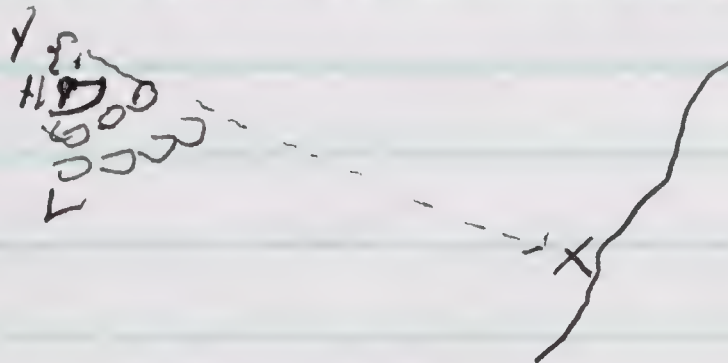
18

Calliope Hummingbird

E. Fork Sheep Creek, Kings Canyon, - fr. Fresno Co, Calif.

May 25, 1942

I figured that if I stood, the movement would give the impression of an approach to the nest, so I remained crouching. As I got down to the point where I was too low for her to see me above the screen of leaves



She definitely stretched her neck so as to be able to see. Reference to the diagram may clarify our respective positions. If L represents the leaves + H the hummer with X me sliding down the slope, she would not be able to see me at point X without stretching her neck the distance HY so as to make her line of vision XY.

Stayed on her nest for about 15 min. Saw her fly East; stay away for about $2\frac{1}{2}$ min, returned to nest from S.E. and after a few zigzags, perched on nest edge & preened, ruffling her bill thru the feathers of her breast; then she stepped into the nest & sat. Still unable to determine

M. Redou

Calliope Hummingbird

E. Fork Sheep Creek, Kings Canyon, ⁵⁵⁰⁰ ft. Fresno Co., Calif.

May 25, 1942

where she went. Sat with her eye on me (I was sitting ~~about~~ a little to the East of South of the nest) & her beak pointing a little East of where I was sitting. She stayed on the nest about 6 min. ~~flew~~, hovered over nest a moment and flew S.E. and then made an arc which took her Northward. Returned from N.W. & sat immediately on her nest, always entering from same direction. Was away roughly 2 min. Curiously enough, when she sat down this time, she began to move her head back & forth from about S. to S.E., her beak at about a 60° angle with the horizontal. She kept this up, moving her head about once every 2 seconds, for about a minute & then stopped & sat quietly once more. Was she watching for some food, or did she see some sign of danger? Sat on nest about 8 min. Left while I was writing reappeared few min. later to the NW. Sat about 10 feet up from nest in cedar tree (?) and then moved to limb to W. Oak branch 2 feet above nest. Sat for a second looking around with side to

Ridgway, 1942

13

Calliope Hummingbird

East Fork Sheep Creek, Kings Canyon, - Fresno Co., Calif.

May 25, 1942

side head movements & then flew directly
away altogether, about 4 min.
on nest. Entered ^{usual} ~~same~~ side. Facing ^{slightly} ~~slightly~~
West ^{1/2} S, eye still on me. Jerkiness of hand-
writing is due to the fact that it
is very cold sitting here on un-
warmed rocks so I have been for
over an hour. My hands, in spite of
warm ~~woolen~~ mittens are almost
~~getting~~ frozen, otherwise all goes well.
To date there has been no sign of a male. Female
has not uttered a sound within my knowl-
edge - Sat on nest about 12 min. Flew
off a little W of Sarah & came in W. of
north after about 2 min. Landed
on overbrush about 1 1/2 ft ^N west of nest
for a moment, fluttering wings, landed
on twig about ¹¹/₂ ft ² below
that for a second & looked around
then sat in nest. Sat for a 1/2 min
or so jerking head pretty reg. from
S.W. to W. beak squin up at about
50° angle, not as high as last time.
Perching before landing usually on
bare limb or bare end of limb.

Redon, 1942

18.14

Calliope Hummingbird

E. Fork Sheep Creek, King Canyon, - ft. Fresno Co., Calif

May 25, 1942

Stayed on nest about 5 min. & then flew straight toward me (a few degrees E. of S.) and reversed Eastward just then. Away a total of about 3 min. or so. When on nest, again began to look from side to side with fairly even jinks, beak at angle of about 60° with horizontal. 9:07 - saw it lower directly on nest, leaves forming sort of screen. Raps side to side movement up for ~~at~~ about ~~from~~ 30 sec. Thought she might be watching for insects; if so, why does she stop after a few seconds only & just sit still? Left at 9:05 for a few minutes & start my perspiration flowing again - afraid I would become congealed & then split.

It must be observed that the times given on or off the nest are only approximate. I had no stop watch & was using the minute hand of a wrist watch. Times obtained were:

on nest -

$$7:35 - 7:50 = 15$$

$$8:42 - 8:54 = 12$$

$$7:51 - 8:00 = 9$$

$$8:56 - 9:01 = 5$$

$$8:03 - 8:20 = 17$$

$$8:22 - 8:28 = 6$$

$$8:20 - 8:38 = 8$$

m. Redon, 1942

15

Calliope Hummerbird

C. Fork Sheep Creek, King Canyon, ft. Fresno Co., Calif.

May 25, 1942

C away from nest: (very rough figures)

7:50 - 7:51 = 1

8:38 - 8:42 = 4

8:00 - 8:03 = 3

8:54 - 8:56 = 2

8:20 - 8:22 = 2

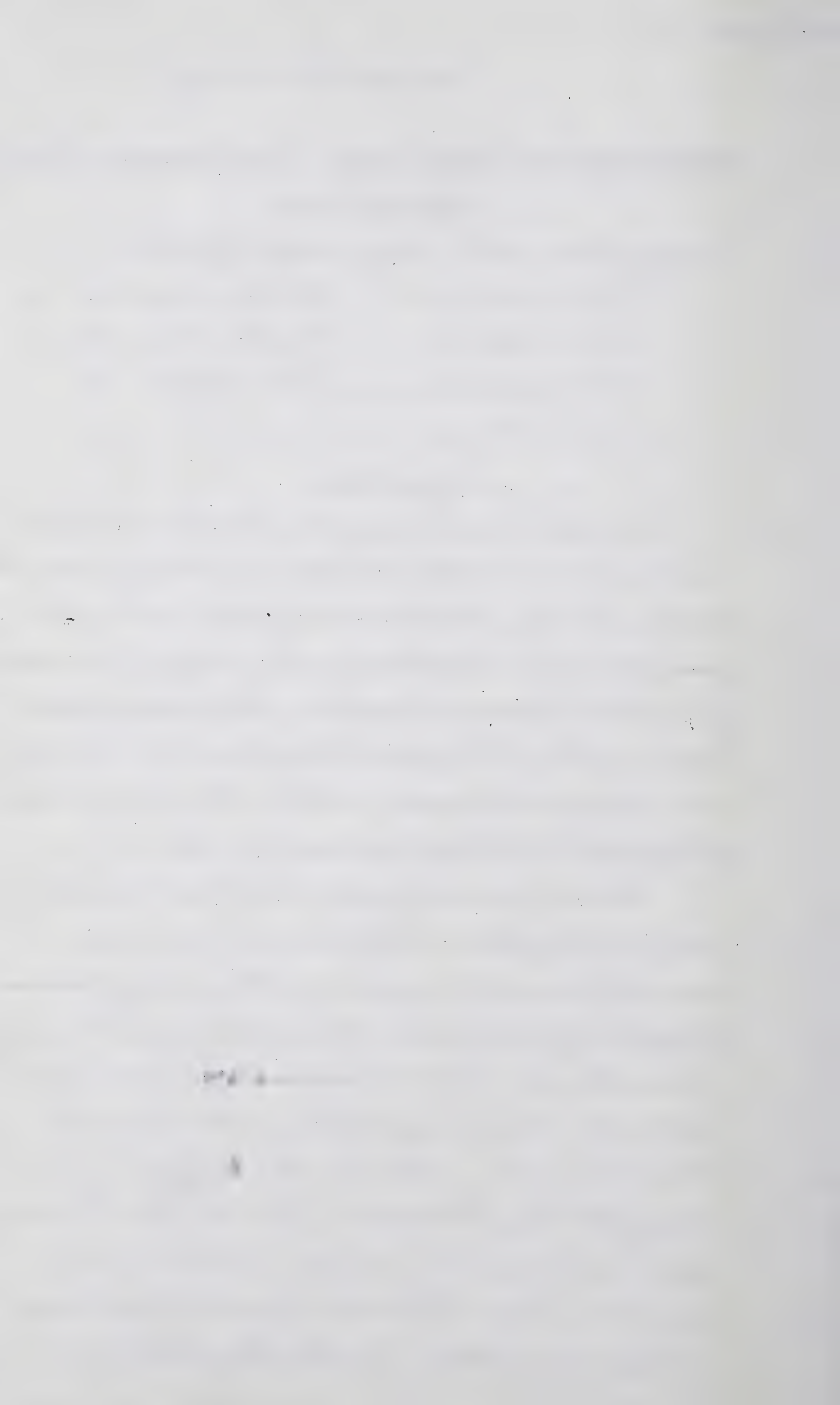
9:01 - 9:04 = 3

8:28 - 8:30 = 2

May 28, 1942

Arrived at region of nest at 10:57. Bird off nest as we arrived & because of our presence, hesitated a little about coming onto nest. She finally came back onto nest, stayed, however, for but a second & started fluttering about again. I did not watch her for awhile, since I was busy with some notes. Decided to search for a possible feeding ground for her.

Hunted around quite a bit and could find no definite place which ~~was~~ ~~was~~ had enough flowers to suggest a set feeding ground. Flycatcher's presence in vicinity suggests presence of insects (?). Saw a Golden Eagle overhead, but was not immediately near nest & thus could not see the effect, if any, on the Hummer. At 11:30, Ida & I may have walked down and we ate lunch. The Dixons came back & Mr. Dixon took pictures of the Hummer & nest. Shortly after two p.m.



m. Redon, 1942

16

Calliope Hummingbird

E. Fork Deep Creek, King Canyon, Fresno Co., Calif.

May 28, 1942

The Hummingbird sat quietly on the nest for ten or fifteen minutes. Arose when I got up to get out of the sun somewhat. Was gone for a minute or so and, upon her return, perched on the edge of the nest, same side as that on which she always gets in ^(nest) & stuck her long beak down into the nest. What the significance of the gesture was, I do not know. After a few seconds of this she settled back onto the nest. The appearance of a bird near the nest, 2:30, caused the Hummer to fly out & chase him away. This was a matter of only a second and not a sound was uttered by either bird. I was not able to see the intruder so quickly was the incident over. ^(Not a hummingbird - warbler size) The Hummer flew immediately back into her nest. & settled down again. She did not circumnavigate the nest several times before entering into it as is her habit when we are the ones who intrude upon her. The bird was a fairly small one & not a bird of prey. Possibly a Warbler? Stayed on nest about ten minutes & then flew off heading NE and then circling till she was headed NW. She was back in a very few seconds. Could see her head turn

M. Redon, 1942

Calliope Hummingbird

E. Fork Sheep Creek, 1/8 Knip Canyon, Fresno Co., CalifMay 28, 1942

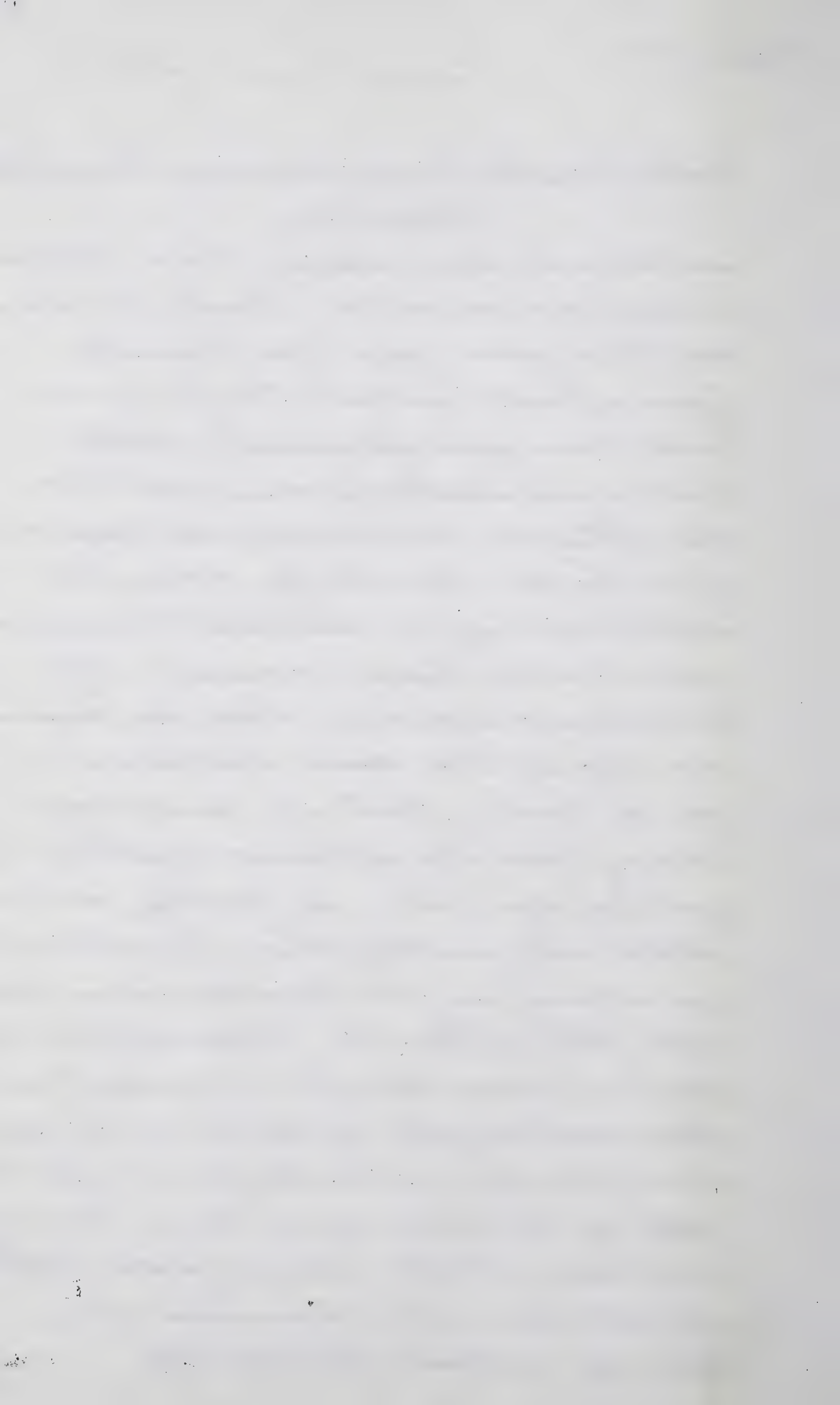
occasionally as she sat in her nest & often, I could see insects go by. Was she chasing an insect? Stayed on nest about 5 minutes; left with a short circle around tree & dove straight down & northward. Gone about 6 minutes. Upon return came from north (1st seen N. of nest) flew to limb on Oak about 4 feet down & 2 ft. W. of the West of the nest. Seen sitting here before. Looked around (sit near edge of limb) & then straight into nest. Seemed as if she to side head movement. Facing me again (I had moved while she was gone) S.E. Stayed on nest eight minutes. Left flying straight toward me and switching direction about 2 1/2 feet away. Could not see where she went ultimately—returned in about 3 min. and, after looking around from same twig as that on which she was perched before; she perched on edge of nest (same side as usual) and seemed again to job down into nest with her bill. Stayed on nest for four minutes, still facing me; left for about 6 minutes (could see nothing

M. Ledon, 1942

Calliope Hummingbird

E. Lake Shup Creek, 5500 ft., Kings Canyon, Fresno Co., Calif.
May 28, 1942

in the nest) and upon return settled directly down in nest. On for 6 minutes and then gone again for 5 minutes. Again - directly on nest. On for 10 min. and then gone for about a minute. Went again directly to nest and then there followed the side to side movement of the head. On nest for 4 minutes and then - off - South West - constant side to side head movement. Off nest about a minute. Then, she perched on edge of nest and downward jab of beak. Sort of pumping - holding beak straight down and then pulling up. Pulls up finally, and then settles very quickly down. I could still see nothing in nest. Direction varies each time. Flew to the S.W. I missed her return due to an interruption - several times there was a gust of wind & the bird's head moved excitedly from side to side as the branch on which the ~~branch~~ nest was situated swung back & forth. Stayed on nest 1 minute & then flew off - probably disturbed by



M. Redon. 1942

48
19

Calliope Hummingbird

E. Fork Sheep Creek, 8,500 ft., Kings Canyon, Fresno Co. Calif.

May 28, 1942

Up sound of voices coming down path.
Back in about $\frac{1}{2}$ minute or less.
On for about 6 minutes and people's
voices coming down path & the
Hummer was off the nest again for
about ~~a~~ minute as people passed.
Watched cautiously while she left nest
& then tried to climb up to see if there
was anything in the nest. I could see
nothing there, but ^{then} as she came up to
feed the birds which I had decided
must ~~have~~ be in the nest. Then, as the
mother came up to her nest, I could
see very faintly what appeared to be the
rounded top of a small head. I went
down to camp immediately and met
J. H. May - who suggested that we might
be able to see within the nest with the
aid of a mirror. We rushed to camp &
found a mirror which we took up with us.
With a little maneuvering, we saw inside
the nest (mother Hummer fluttering about
anxiously). There were 2 tiny blackbeings with
broad orange beaks, quite short, and wide open
mouths. We could find no shell fragments
on the ground.

M. R. Lox, 1942

Calliope Hummingbird

E. Fork Sheep Creek, 5,500 ft., King R. Canyon, Fresno Co., Calif.

feeding

May 28, 1942

2:28 - 2:30 = 2 on

2:30 - 2:40 = 10 off

2:41 - 2:46 = 5 on

2:46 - 2:52 = 6 off

2:52 - 3:00 = 8 on

3:00 - 3:03 = 3 off feeding

3:03 - 3:07 = 4 on

3:07 - 3:13 = 6 off

3:13 - 3:19 = 6 on

3:19 - 3:24 = 5 off

3:24 - 3:34 = 10 on

3:34 - 3:35 = 1 off

3:35 - 3:39 = 4 on

3:39 - 3:40 = 1 off feeding

3:40 - 3:45 = 5 on

3:45 - ? off

(?) 3:52 - 3:59 on

3:59 - 4:00 off

4:00 - 4:01 on

4:01 - 4:02 off

4:02 - ? on

} Disturbed by people
coming up path.

feeding?

m. Redon, 1942

49
24

Calliope Hummingbird
E. Fork Sheep Creek, 5,500 ft, Kings Canyon
Cedar Grove, 4,600 ft, S. Fork Kings R., Fresno Co., Calif.

May 29, 1942

at 3:50^{p.m.} on our way down from
Lookout Peak, all six of us stopped in
on the Calliope Hummingbird. She flew
off at our approach, then, after a few
minutes, returned to the nest again.
~~However, we all sat~~ a subsequent
movement of one of us, resulted in
her leaving the nest again. We all sat
down along the trail & she returned to
the nest. She sat facing us, the five
girls, (S.E.) and Mr. Lison was about
15 ft. up the trail. He arose very quietly &
moved a foot or so closer to the nest;
she apparently did not notice this; must
have been watching us rather than him.
They left me alone here at 4:05; she was
already off the nest when they left &
did not return for five minutes after
that. On her return, at about 4:10, she
sat directly on the nest, not feeding the
nestlings. She gave side to side head movements
frequently for a few seconds. Then she
sat fairly quietly, although occasionally
cocking her head to one side, etc.

M. Redon, 1942

Calliope Hummingbird

E. Fork Sheepcreek, 5,500 ft, Kings Canyon, Fresno Co. CalifMay 29, 1942

She made no move to feed her nestlings during this time. She sat on the nest for 15 minutes and was gone for 2 min. On her return, she perched on the nest edge and proceeded to jab her beak down into the nest rather gently, and then to give several up and down jabs; sometimes after the last jab, on the upward jab, she would pull into view a small part of the nestling's beak which was around hers. She alternated from one side to the other (judging from the position of her head as she jabbed into the nest) - going three times to each side. Between each side, she would open and close her beak several times (the tip or rather ^{segment} ^{up} $3/4$ from the end looked back & shiny as though wet) and while she moved her beak up and down, her throat would move up and down. After completing her feeding, she sat down very carefully in the nest, her movements being much slower & more deliberate than they had been before.

M. Reder, 1942

Calliope Hummingbird

E. Fork Sheep Creek, 5,500 ft., Kings Canyon, Fresno Co., Calif.May 29, 1942

After this, she sat quietly upon her nest for awhile. I decided to investigate again as to the presence of eggshells under the nest. However, again I saw nothing. The white rock under the nest made this task unusually difficult. During my search under the nest, the anxious mother flew constantly back & forth, to judge from her shadow which ^{accompanied by} ~~wandered~~ from one side to the other ~~coast~~, ^{whir of} wings.

4:10 - 4:25 = on nest

4:25 - 4:27 = off nest - feeding

4:27 - ? (disturbed here by my searching under the nest for possible eggshells around it.)

May 30, 1942

Arrived at nest at 10:55. Hummingbird not in sight. Climbed on log and held mirror over nest. Nestlings now had a fine gray down, about 1/4 of an inch (?) in length. As I was looking at them, the mother came & naturally was quite worried. She would fly from branch to branch of the nest tree & the cedar behind it. She would whirl right past my face with rather frequenting

M. Redon, 1942

Calliope Hummingbird-

E. Fork Sheep Creek, 5,500 ft., Kings Canyon, Fresno Co., Calif.May 30.

speed & directness. I moved several feet further away from the nest - now she hovered about the nest, still not going in. Finally, I withdrew from my log and then sat to the NE. She came over almost immediately & sat down. After a few seconds upon the nest, she whirled about from place to place around the nest tree, stopping in mid-air about 4 ft. from the ground for a full second, then jerking upwards several feet and after a moment, plunging in another direction. Without being for an instant out of my sight, she returned, perched on the edge of the nest, and began her ^(feeding of young) downward jabs. First to one side - several (about 4 jabs) & an upward pull of her beak. Then to the other side - several downward jabs and again the upward pull of the beak; back to the first side with two jabs & to the second with several jabs and then quickly settling down.

Sat down for 1 minute. Rose up and hovered around for awhile. Back in about two minutes.

In sight all the time. Sat down for about 3 minutes, then out. - Done only about 1 minute. Then followed the ^{action} feeding described above. This time

M. Redon, 1942

Calliope Hummingbird -

E. Fork Sheep Creek, 5,500 ft, King Canyon, Fresno Co, CalifMay 30, 1942

upon her return, she sat on branch, several feet from the nest (below) for a few minutes, looked around and onto nest.

she sat on the nest for a very short time perhaps a few seconds & disappeared for a short time. Upon her return, she fed her young again, perching always on the same side of the nest. The feeding movement involved a long downward jab - then her beak, with a shiny, ^{rust-}black-looking end, was pulled back up. She made a jab somewhat to the side of the other (2nd nestling?) and this jab was accompanied by pumping movements of nostrils & slight up & down flicking of the mother's beak. She raised her beak & seemed to swallow. Then, she moved her head from side to side twice beak still pointed downward. Finally, she gave a last jab in the same region as her first & sort of scrambled on to the nest. She seemed to move her breast forward & down, then with a slight jerk to let loose the edge of the nest. She sat on the nest for ~~several~~⁸ minutes, was gone for three minutes. She sat for a few seconds

M. Redon, 1942

Calliope Hummingbird -

E. Fork, Sheep Creek, 5,500 ft., Kings Canyon, Fresno Co., CalifMay 30, 1942

on a branch in the alder to the NW of the nest tree about 6 ft. above the nest & cleaned her beak carefully on the limb with a motion first to the left & then to the right. She then went to the nest, first stopping for a moment on her short limb below the nest. I look around her, & then came upon the nest - without feeding young. She was on the nest for for about two min. Flew off for almost a minute & then was on for 2 more minutes. She left the nest for three minutes, returned without feeding young. Sat & jerked her head from side to side as she was seen doing before. She was on the nest for 3 min. & then flew off. Returned after 6 minutes, perched on the nest edge & proceeded to feed the nestlings. She jabbed downward with her beak & then followed some pumping on her part which, however, resulted in only a slight up & down movement of her beak. She repeated this movement on the same side after pulling her beak out. Then she shifted to the other side & repeated the same motions. She came back to her right & then to her left again.

M. Redon, 1942

Calliope Hummingbird

E. Fork Sheep Creek, 5,500 ft., Kings Canyon, Fresno Co., CalifMay 30, 1942

She sat on the nest 12 minutes until 12:18. Flew off and was out of sight for a few moments. Then, she was seen cleaning her head on the alder tree. She flew from perch to perch on the alder, in the Golden Oak & so on around. At 12:21, she flew back onto the nest without feeding her young. She sat on the nest 2 min. (12:23) and then was off. At 12:25, she reappeared. First, she perched on the south side of the nest (1st time she has ever been on any but the ~~east~~ ^{west} side) and started to feed her young. However, she pulled her beak up and shifted position to the ~~east~~ ^{west} edge of the nest, her usual place, and proceeded to feed the nestlings. This time, she gave a downward jab, shaking her neck & pumped quite vigorously, her feet apparently wet ^{her tail} against the nest edge. Then she raised her head & seemed to lean ^{her tail} over the side (N) of the nest; then, she jabbed a little to the right with exactly the same pumping motion and once more she ^(my) dove down over her young - she sat quite still for about 1 minute & then was off again. She was completely out of sight for 6 minutes. On her return, she moved directly to the nest & sat directly down. She made no move to feed her nestlings. This was the first time. She did not sit facing me (slightly E. of north) she faced south.

m. Redon, 1942

Calliope Hummingbird

E. Fork, Sheep Creek, 5,500 ft, Kings Canyon, Fresno Co, Calif.May 30, 1942

She sat quietly on the nest for about 5 minutes, then flew off, remaining away for about 2 minutes. On her return, she perched on the West side of the nest again and proceeded to feed her nestlings. She thrust her beak quite far down apparently, and in the course of her pumping would pull the young bird's head up, so you could see his yellow beak much paler than the first time I saw it, and bobbed head, bobbing up & down. She fed each about 4 times & seemed quite violent about it this time. Then she moved over the nestlings again; I notice that as she pulls her breast forward, she is apparently still clutching the nest edge, and she pulls her neck down & forward so that her neck and back form a straight line. She does not pull her neck up until she is safely settled on the nest ~~and~~, flattening her wings & bristling her tail in the process of settling down. After remaining on nest 10 min., she left. Returned in 5 min. and fed young - each about 3 times. No sign of other three all the time. Took time off for 5 min. Found her sitting on nest at 1:15. My position was now S E of nest (nearer S). Left nest for 4 min. & returned, did not feed young, sat facing me & turned down that nose & her breast showed above nest edge more than showed before -

M. Ridon, 1942

Calliope Hummingbird -

E. Fork Sheep Creek, 5,500 ft., Kings Canyon, Fresno Co., CalifMay 30, 1942

Table showing time on & off nest & time of feedings.

11:17 - 11:24 = 7	Sat on nest
11:24 - 11:26 = 2	Away from nest - no feeding on return
11:26 - 11:29 = 3	On nest
11:29 - 11:30 = 1	Off nest - Fed nestlings on return
11:30 - ?	On nest
? - 11:38	Off nest - Fed nestlings on return
11:38 - 11:46 = 8	On nest
11:46 - 11:49 = 3	Off nest - Cleaned back - no feeding -
11:49 - 11:51 = 2	On nest
11:51 - 11:52 = 1	Off nest - no feeding
11:52 - 11:54 = 2	On nest
11:54 - 11:57 = 3	Off nest - no feeding
11:57 - 12:00 = 3	On nest
12:00 - 12:06 = 6	Off nest - Fed young on return -
12:06 - 12:18 = 12	On nest
12:18 - 12:21 = 3	Off nest - flew from perch to perch near nest, Cleaned beak on alder - no feeding -
12:21 - 12:23 = 2	On nest
12:23 - 12:25 = 2	Off nest; fed young -
12:25 - 12:31 = 6	On nest
12:31 - 12:37 = 6	Off - no feeding
12:37 - 12:45 = 8	On nest
12:45 - 12:46 = 1	Off nest - feeding
12:46 - 12:49 = 3	On nest
12:49 - 12:54 = 5	Off - no feeding -

M. Redon, 1942

Calliope Hummingbird

29.
30

E. Fork Sheep Creek, 5,500 ft, Kings Canyon, Fresno Co, Calif.

May 30, 1942

Table of feedings, etc. (cont.)

12:54 - ~~1:04~~ 1:04 = 10 On nest

1:04 - 1:09

= 5

Off nest - fed nestlings on return

movement to S.E. of nest & to get water -
disturbed her -

1:15 - 1:22 = 7

On nest -

1:22 - 1:26 = 4

Off nest - no feeding

1:26 - 1:35 = 9

On nest

1:35 - 1:38 = 3

Off nest - Fed young

1:38 - 1:39 = 1

On nest

1:39 - 1:50 = 11

Off nest - no feeding on her return

1:50 - 1:57 = 7

On nest

1:57 - I tried now to look into the

nest - bird flew about wildly

Summary shows that in 2 hrs. and 40
minutes mother fed young 7 times.

M. Redon, 1942

Calliope Hummingbird

E. Fork Sheep Creek, Kings R. Canyon, 5,500 ft., Fresno Co., Calif.May 31, 1942

Arrived at Calliope nest at 9:55. At 10:05, she was sitting on the nest. Timing proceeds from that time. She was sitting fairly erect on the nest; one could see about 1 inch below the bottom of her black throat markings; facing S.E. ^{left} appeared 3 min. later, from NW. Flew directly into nest; no feeding of young. Faced NE; sitting straight - ^{constant} no side to side head movement observed ^{for few seconds} after she sat on nest. I should note here that she was off the nest when I came & seemed today to be little disturbed by my presence. Not so straight in nest this time; only about a quarter inch of nest below bottom of black throat markings visible. Reappeared after about 4 min.; sat for a second on high branch (about 7 ft. above nest) of alder and cleaned bill on bare limb, wiping it with side to side head movements on the branch; then she moved to a branch in nest tree, about 2 ft. above nest; sat at tip of this branch for a moment; came down stopped in mid-air in direct line with nest & about a foot away, and then settled on nest edge & fed young. Each seemed to receive about 3 feedings; again I had impression that she alternated from one to other; I am not certain of this, however. She jabbed down into offspring's mouth, later & propped farther above nest edge in feeding now, ant. with neck arched, would

m. Redon, 1942

52

Calliope Hummingbird

E. Fork Sheep Creek, 5500 ft. (?), Knip P. Canyon, Fresno Co., Calif.

May 31, 1942

pump up and down, preserving her balance with slight wing flutters. She settled again on the nest in the awkward fashion which I have observed her to use since the eggs have been hatched; this consists of pulling her neck out with head down for balance, & then sliding her body onto nest with several ^{gentle} jerks. She tugs at her wings a little & then feels fairly well settled. This time she faced almost due South as she sat. Sat on nest 6 minutes and then flew off. Returned in four minutes; sat directly on nest, faced NE (almost directly facing me and this time = side to side head jerks for a second or so. Occasionally cocks her head slightly, after steady jerking from side to side ceases, and also turn neck occasionally to one side or the other. When she leaves nest (sat 4 min. this time) she varies the direction which she immediately takes, then reverses & often, although not invariably dives NW & down into Canyon. I have still been unable to observe exactly where she goes or what she does. Several times, when she has returned

m. Redra, 1942

Calliope Hummingbird

E. Fork Sheep Creek, 5,500 ft., Kings R. Canyon, Fresno Co., CalifMay 31, 1942

in vicinity of nest & gone from perch to perch my impression has been that she was insect hunting; however, these times when she leaves for periods of 5 and 6 minutes, it is impossible to say where she goes. Furthermore, ~~although~~ I have wanted to investigate the territory in the direction in which she goes most often; it is impracticable to do this because the sides of the gorge are steep & covered with slippery loose gravel & Mr. Dixon tells us that these steep sides are good things to stay away from.

Was gone six minutes & fed young on return. Again slid onto nest, facing East (actually North of East actually) and facing nest almost directly. It is an interesting thing to note that she ^{often} alternates. She leaves the nest & returns without feeding the young; next trip she feeds them on her return, etc. This has been true this for this morning, & was true yesterday afternoon. Yesterday morning she had been upset by my peering into the nest & perhaps this helps account for the irregularity in this sequence of events at that time. ¹¹ She stayed on the nest for 2 min. & then flew off again. N.W. I was able to follow her for a time & see

M. Redson, 1942

33.
34

Calliope Hummingbird -

E. Fork Sheep Creek, 5,500 ft., King R. Canyon, Fresno Co., Calif.

May 31, 1942

her about 50 or 60 yds. away, at about the level of the trail, stopping in mid air, then flying down & stopping, then up & stopping. After perhaps 30 seconds of this, she was lost from sight. (Insect hunting?) On her return she perched just a second on the Alder, then she stopped just an instant on a branch a foot above the nest, perched at nest edge & fed yocoy. Twice she prodded in one direction; with forceful pumping motions bt. Jules. I could see the nestling's beak surrounding hers. It is now a pale yellow & still short & broad. I could not estimate the length from what I saw. Then she raised her beak into the air and made a sort of swallowing movement with her throat. She now arched a little to the right (her right) of where she had previously gone down & twice more the spasmodic pumping movement occurred. She seemed to lean farther down into the nest now so that only a quarter of an inch of her beak can I see at its lowest point in the process. She settled again onto the ^{nest} nest, now facing the W. and turned her head, as I turned ^{from my nose} mine to look at her. Time = 11:05 and the sun is on her now. Stayed on nest 20 min. Looking around, raising her head occasionally; She flew NW & down into the gorge again -

M. Redon, 1942

~~Calliope~~ HummingbirdE. Fork Sheep Creek, 5,500 ft., Kings R. Canyon, Fresno Co., CalifMay 31, 1942

Stayed away 8 minutes. Upon her return, she perched on edge and fed nestlings again. Again - down jerked & several fatal looking pumpings downward jaws. Then she raised her beak above horizontal, lowered it again & looked from side to side anxiously. Selecting nest the mouth first to her right, she again proceeded to pump & jerk. Then she slid onto the nest, facing East & looked around a little; gave a few side to side jerks. Left after 4 min. Stayed away about 3 min. & was seen during the last minute of that time in perches in alder, then hovering in air for awhile, but then in yard below nest, short bands which seemed like a favorite, & then directly into nest. Facing somewhat N of E. Flycatcher's note heard. Hummer in nest raised head & beak at \angle of 60 degrees - move head slightly from side to side. Stayed on nest 12 min. & then off - again - NW & down. Reappeared at 11:58 in scrub ^{golden} oak S.E. of nest tree. Perched & wiped beak, straightened feathers. Up about 6 inches. Changed direction, now facing NE & preened & cleaned beak. High in alder - spread tail & wings, cleaned beak; Edge of nest = fed young. Still facing a little E of S.

M. Redon, 1942

Calliope Hummingbird

E. Fork Shing Creek, 5,500 ft., Kings R. Canyon, Fresno Co., Calif.May 31, 1942

Took a half-hour recess (12:00-12:30) and then back to the Calliope. At 12:54, she flew off the nest, having stayed on 12 minutes, & flew NW & Down again - Reappeared at 1:01 - fed young & disappeared again. This time without settling. Reappeared at 1:09 high in alder - cleaned beak, flew down 6 ft or so, cleaned beak; down to low branch on nest tree (her usual one) perched there for a while - I should have remarked before this, that when she perches, her wings flutter constantly & especially with each turn of her head, etc. She flew into nest (wings still beating for a second after landing). Faced NE. Stayed on 5 min. then flew off. At 1:18 reappeared on alder - Preened, cleaned beak, spread tail, etc. Nest now in shade - disappeared again for a few seconds & again seen in alder. Perched on branch below nest for a while - looking around - then back to alder - back to small branch below nest - looks around - Edge of nest - infusing - left nest at 1:33 - Remained on alder - fanned tail, spread wings; cleaned bill; scratched - flew toward nest & scattered shower of water (?) as she flew -

M. Redon, 1942

36.
37

Calliope Hummingbird -

E. Fork Sheep Creek, 5,500 ft, Kings R. Canyon, Fresno Co, Calif.

May 31, 1942

Tried to look in nest when she disappeared again. Result - I saw 2 very fuzzy, sooty things I found one head with difficulty & even then could make out no details of it.

Mother flew around me excitedly and perched right in front of me as before. I left for camp at 2 p.m. intending to return later.

My morning figures show that during the 2 hrs. from 10:00 a.m. to 12:00 m. - she fed the birds 5 times. She fed them once at 12:30 and 1:30.

Returned at 4:30, hummingbird - frightened off. In nest at 4:35 until 4:46, came on nest flying & sat facing East. Stayed away from nest 13 min. - During time seen flying near nest tree once. Fed the young very vigorously. Then was off again without settling in nest.

Saw in various perches on nearby trees. Finally came on perch below nest (previously mentioned) & flew into nest. No feeding.

M. Redon, 1942

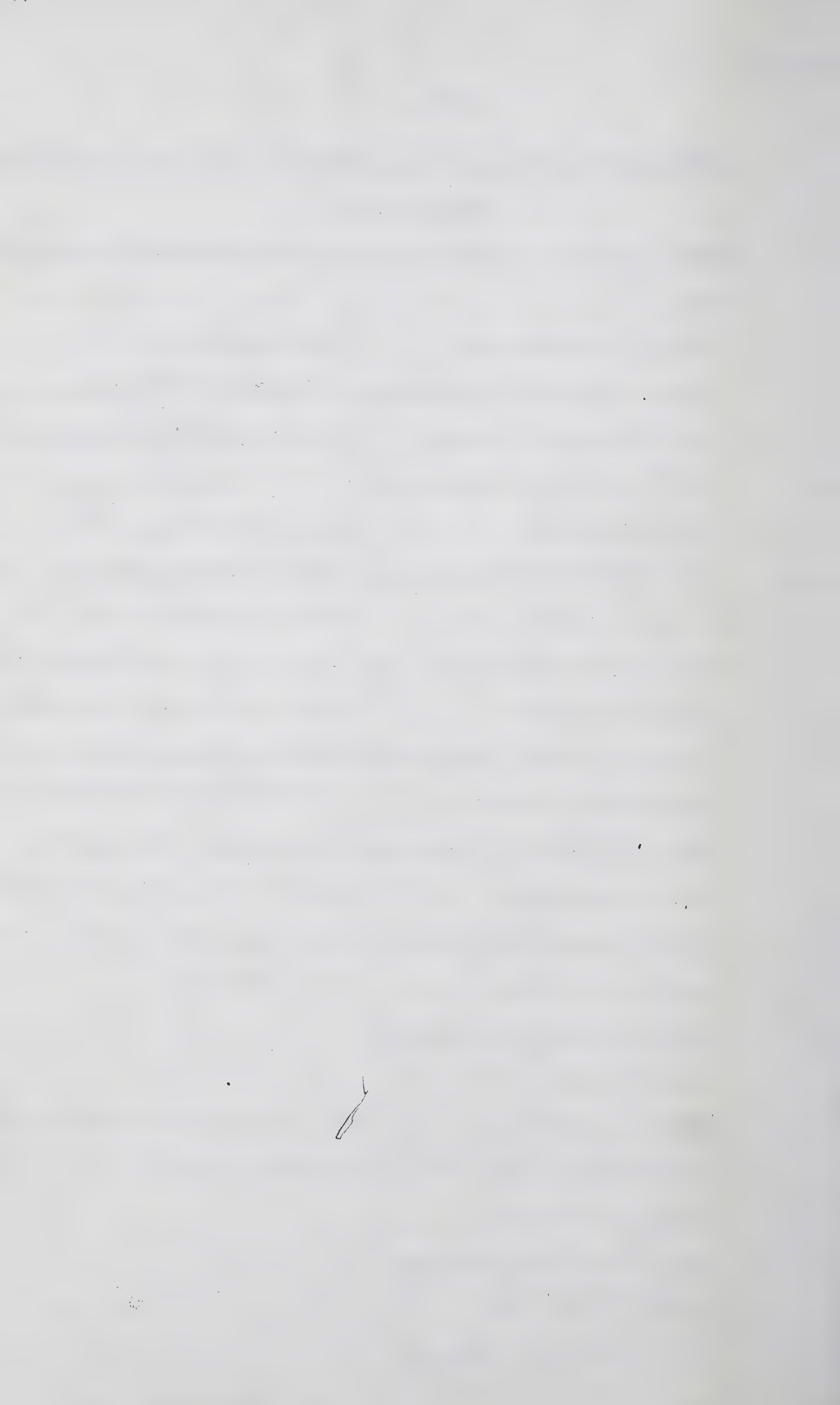
Calliope Hummingbird

E. Fork Sheep Creek, 5,500 ft. Kings R. Canyon, Fresno Co. Calif.

May 31, 1942

Table of feedings & time spent on nest and away from nest.

10:05 - 10:09 = 4 On nest	12:42 - 12:53 = On = 11
10:09 - 10:12 = 3 Off nest; no feeding	12:53 - 1:01 = 8 = (Off - feeding)
10:12 - 10:18 = 6 On nest	1:01 - 1:10 = Off (flew off injured)
10:18 - 10:23 = 5 Off - (feeding) -	(no feeding) -
10:23 - 10:28 = 5 On	1:10 - 1:15 = On - 5
10:28 - 10:32 = 4 Off - (no feeding)	1:15 - 1:21 = 6 Off (no feeding)
10:32 - 10:36 = 4 On nest	1:21 - 1:33 = On = 12
10:36 - 10:42 = 6 Off - (feeding)	1:33 - off - I tried to work
10:42 - 10:48 = 6 On	into nest with berries -
10:48 - 10:49 = 1 Off - (no feeding)	<u>mother flying around me -</u>
10:49 - 10:51 = 2 On	
10:51 - 10:58 = 7 Off (feeding)	4:35 - 4:46 " On nest
10:58 - 11:18 = 20 On	4:46 - 4:59 - Off nest - feeding
11:18 - 11:26 = 8 Off (feeding)	4:59 - 5:10 - Off - (left injured)
11:26 - 11:30 = 4 On	feeding -
11:30 - 11:33 = 3 Off (no feeding)	
11:33 - 11:45 = 12 On	
11:45 - 12:00 = 15 Off - (feeding)	At 10:00 and 12:00 = 2 hrs. = 5 feedings
	At 12:30 - 1:30 = 1 hr. = 1 hr. = 1 feeding
12:30 - 12:36 = 6 On	
12:36 - 12:38 = 2 Off - (no feeding)	
12:38 - 12:40 = 2 On	
12:40 - 12:42 = 2 Off - (no feeding)	



M. Ridon, 1942

Calliope Hummingbird

E. Fork Sheep Creek, 5500 ft, Kings R Canyon, Fresno Co, CalifJune 1, 1942

10:50 - Feeding young from S. side & sat facing N.W. Stayed on nest 9 min. & then flew off - N.W. & up. Reappeared near nest a few minutes later. Might have gone in, but some people came up the trail & she again disappeared.

Seen at 11:10 in alder, wiping her beak. Came to nest, West side this time & fed young; faster & much stronger, heads & beaks easily visible as she feeds them. There was an interruption, and I lost track of her for a while.

When she returned, she sat on the nest for a time facing NW and several times I saw her move her wings ~~as though~~ ~~she were sitting them.~~ & ruffle them up several times. She left the nest & at 11:45 I saw her sitting in the alder, vigorously preening; scratching; wiping her bill, fanning the tail, etc. A minute or so later she was on the usual edge of the nest, feeding her nestlings, almost all of whose heads were visible. Settled on nest facing S.E. Left nest again for a while. Returned without feeding young - faced S.E. On nest 4 min. - Flew off in a wide arc which finally directed her NW again.

M. Redon, 1942

Calliope Hummingbird

Calif.

E. Fork Sheep Creek, 5500 ft, Kings R. Canyon, Fresno Co,June 1, 1942

she stayed away only about a minute and a half or two. When I turned, she was already on the nest, facing SE and I do not know whether she fed her nestlings or not. Sat on nest about 4 minutes and then flew off. Returned in about 4 minutes & fed her youngsters. Now that I can see the nestlings' heads so she feeds them I can see that she does alternate from one to the other in her feeding & that between each, she sort of pulls her head forward & jerk it back (forcing food up?) she flew off immediately then returned in about 3 minutes without feeding her young.

On nest 11 min. and then flew off to NW again. Arrived without feeding young; flew off to NW after 2 min. on nest. Reappeared 7 minutes later & fed young. Definitely she fed them alternately this time; she sat facing SW & SE when she had finished. In getting on the nest she flapped her wings this time. Left after a few minutes. Did not feed young on return. Flew into nest facing E. Sat on nest 4 minutes & then flew off to the NW & down again.



M. Redon, 1942,

Calliope Hummingbird

E. Fork Sheep Creek 5500ft, Kings R. Canyon, Fresno Co, Calif.

June 1, 1942

Hours of feedings, etc.

10:50 - 10:55 - Off - feeding

10:50 - 10:59 - On nest

10:59 - 11:11 = Off - feeding

11:11 - 11:13 = Off (flue mixed.) no feeding

11:13 - 11:14 - On

Interruption

11:19 - 11:34 - On -

11:34 - 11:46 - Off - (feeding)

11:46 - 11:54 - On

11:54 - 12:00 - Off - no feeding

12:00 - 12:04 - On nest

12:04 - 12:06 = Off - (?)

12:06 - 12:10 = On

12:10 - 12:14 = Off (feeding)

12:14 - 12:15 = On

12:15 - 12:18 = Off (no feeding)

12:18 - 12:29 = On

12:29 - 12:32 = Off (feeding)

12:32 - 12:34 = On

12:34 - 12:41 = Off (feeding)

12:41 - 12:44 = On

12:44 - 12:47 = Off (No Feeding)

12:47 - 12:52 = On

12:52 - 12:58 = Off (?)

12:58 - 1:00 - On ~

1:00 - 1:10 Off - (feeding)

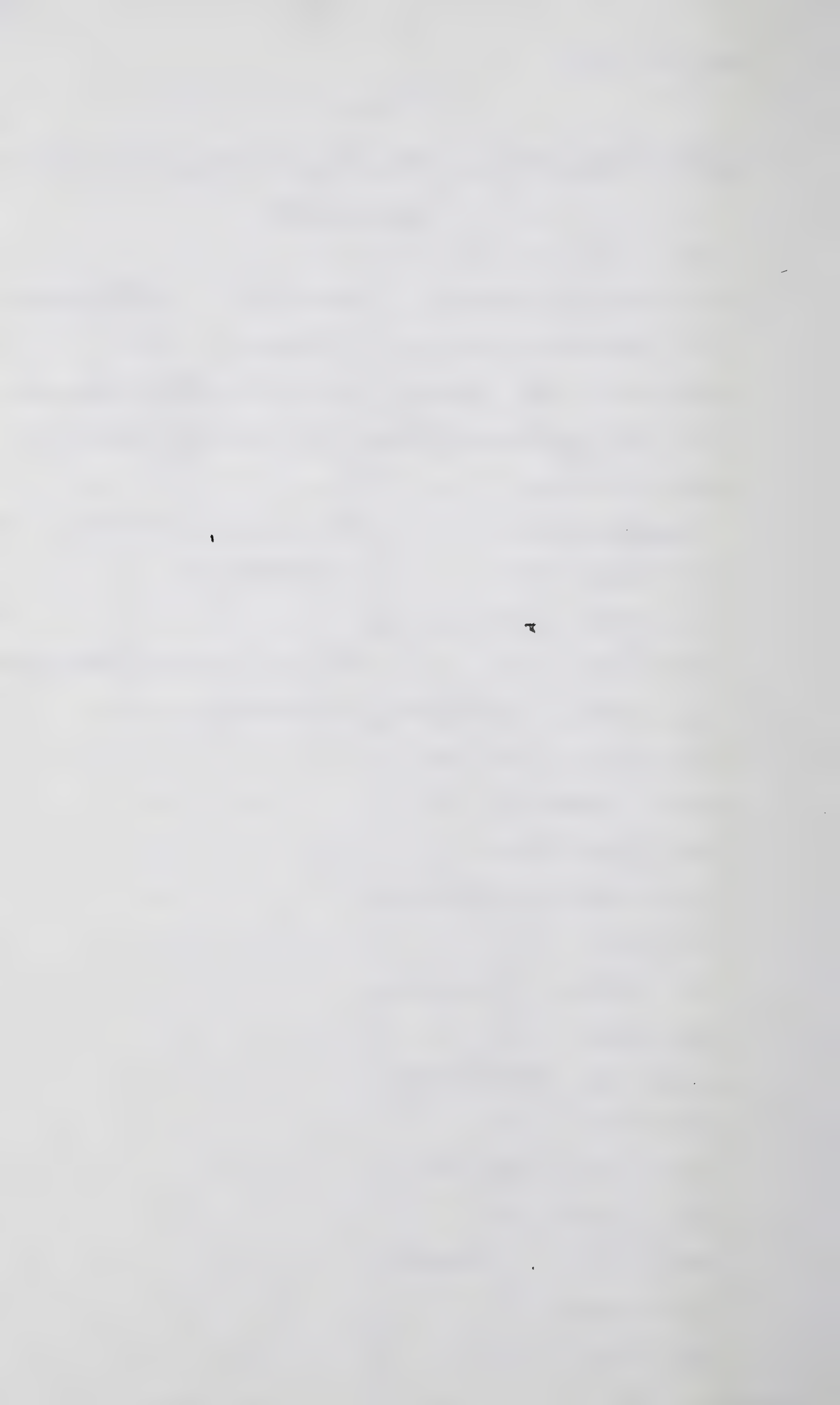
1:10 - 1:15 On

1:15 - 1:28 Off - (No feeding)

1:28 - 1:32 - Off - (feeding)

BT. 10:50 - 11:14 = 24 min. =
2 feedings.

BT. 11:20 - 1:30 = 2 hrs. 10 min.
= 5 feedings -



M. Redon, 1942

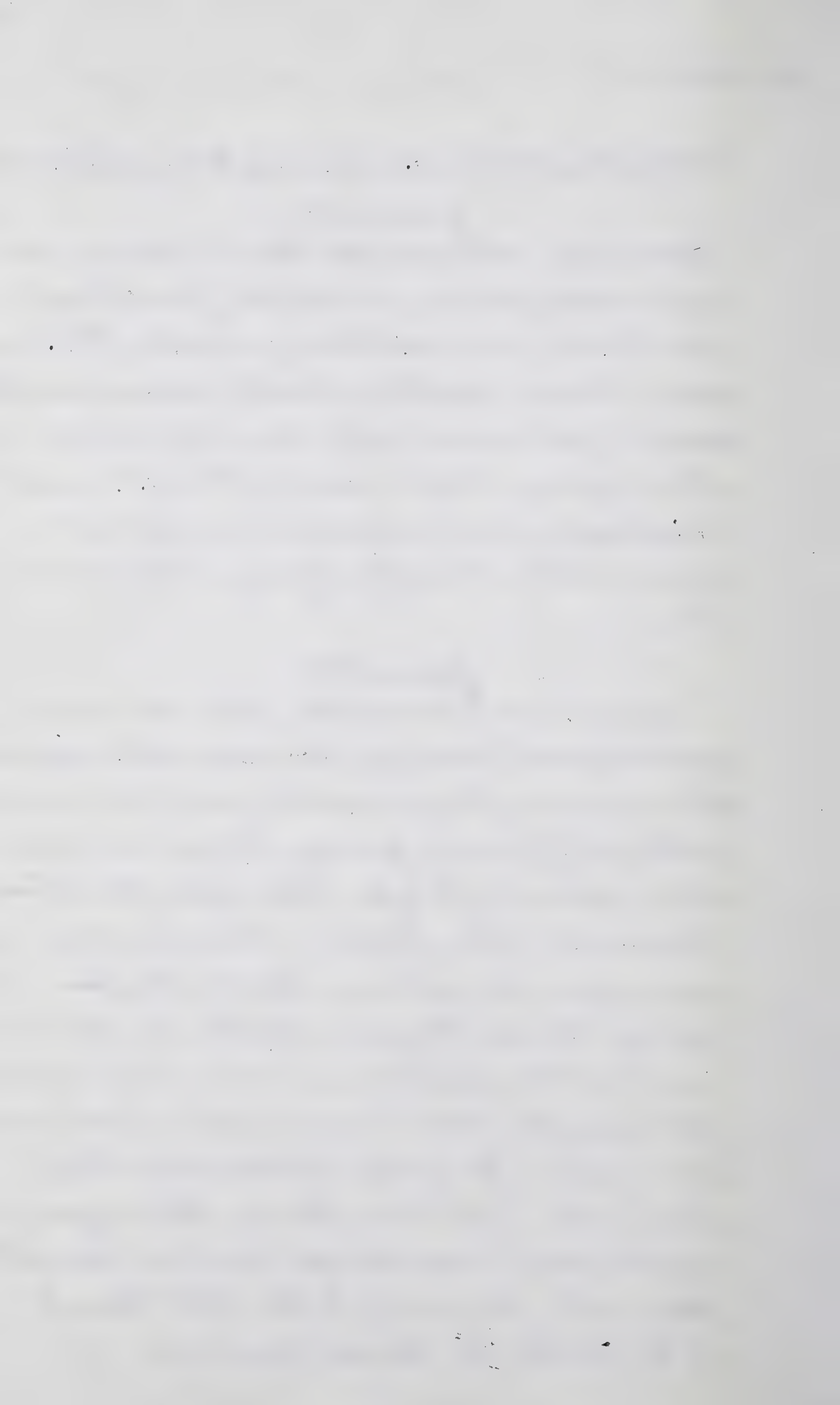
Calliope Hummingbird

E. Fork Sheep Creek, 5500 ft, Kings R. Canyon, Fresno Co, Calif.June 1, 1942

Appeared in oak near nest tree. Perched in sunlight and preened, scratched, fanned tail etc. I was not watching as she entered nest, but I looked barely 2 seconds after and I feel sure she had not time to feed young. Left nest after a minute. Reappeared for a second, then left nest again & returned to feed young. I left at this time.

June 2, 1942


Arrived at nest about 7:50 a. m. and saw that bird was off the nest. She appeared at 7:54 and flew directly onto the nest, without feeding young. Faced N.E. (I was sitting somewhat N.E. of her). Left nest after about 5 minutes. Drove 8 min. - Flew directly into nest upon her return - did not feed her young. Faced N.E. again. Weather here cloudy and rather cold now, sun not up here yet. Left after about 10 min. & returned in 4 min. to feed young. Fed first one & then the other; each was fed three times. Alid again onto nest on which she stayed barely a minute & then she flew off to the S.W. Faced S.E. while on the nest this time.



M. Redon, 1942

Calliope Hummerbird

E. Fork Sheep Creek, 5500 ft., Kings R. Canyon, Fresno Co., Calif.June 2, 1942

Reappeared in several min. coming from S.E. & ~~saw~~ flew directly onto nest, wings beating. Faced NE; no feeding of young. Searched nest with field glasses for sight of young while she was gone. They cannot be seen at all from below (i.e. from the trail). While sitting on nest, kept turning head from side to side with beak held at an \angle of about 60° with horizontal. Could see nothing unusual up above. Watching insects (3). Flew off while I was writing the comment. Did not ~~note~~ ^{see} in which direction she went. Reappeared in about 11 minutes from S.W. Perched on edge of nest & fed young alternately. As far as I could see, one was fed 3 times & the other twice. Slid onto nest facing S.E. Noticed that between each feeding i.e. ~~at~~ during the time that she had pulled her beak from one youngster & was preparing to put it into the other's mouth, she usually threw back her head in a swallowing movement. She sat very low in the nest this time  her head & back almost in a straight line ^{line} her back at an angle



m. Redon, 1942

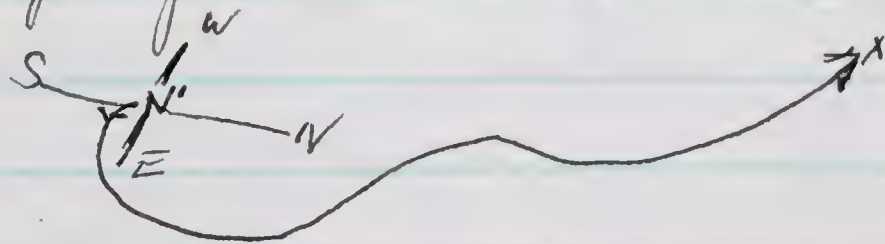
43
44.

Calliope Hummerbird

E. Fork Sheep Creek, 5500 ft, King R. Canyon, Fresno Co., Calif

June 2, 1942

Left after about 6 minutes and reappeared in 3 min. ^{from SW.} flying directly into nest & for several seconds turning head rapidly from side to side. Facing NE & sitting very erect this time. Could see about 1/2 in. of breast below contour of black throat markings. Disappeared before I could note the direction she took. Appeared in about 4 min., perched at edge of nest & fed nestlings. I could not see the direction of her first job, however, ^{or} the next three, two ^{via a rock} seemed directed ^{toward} the same part of the nest. Slid on nest facing NE & ruffled her wings several times as she settled down. Did not notice, between feedings, the throwing back of the head which I had noticed before. Flew off in about 5 min. Made an arc & flew around toward NE swooping downward & then up again.



If N' represents the nest, she followed line N'X.

M. Reder, 1942

45

Calliope Hummingbird

E. Fork Sheep Creek, 5500 ft, Ling R. Canyon, Fresno Co, Calif

June 2, 1942

Figures showing time of feeding, etc.

7:54 - 8:01 = On nest

8:01 - 8:09 = Off - (No feeding)

8:09 - 8:19 = On

8:19 - 8:23 = Off (Feeding)

8:23 - 8:24 = On

8:24 - 8:26 = Off (No feeding)

8:26 - 8:33 = On

8:33 - 8:44 = Off (Feeding)

8:44 - 8:50 = On

8:50 - 8:53 = Off - (No feeding)

8:53 - 8:55 = On

8:55 - 8:59 = Off (Feeding)

8:59 - 9:05 = On

9:05 - 9:17 = Off (Feeding)

9:17 - 9:19 = On

9:19 - 9:19 = Off (No feeding)

9:19 - 9:20 = Off (gray squirrel)

9:20 - 9:32 = Off - (No feeding)

9:32 - 9:34 = On

9:34 - 9:49 = Off - (Feeding)

9:49 - 9:50 = On

9:50 - 9:52 = Off - (No feeding)

9:52 - 9:57 = On

9:57 - 10:16 = Off - (Feeding)

10:16 - 10:18 = On

Interruption here —

10:30 - 10:32 = more " —

Bt. 8:00 a.m. & 10:20 - 2 hrs. & 20 minutes - fed her nestlings 6 times.

M. Redon, 1942

Calliope Hummingbird

E. Fork Sheep Creek, 5500 ft, Kings R. Canyon, Fresno Co, Calif.June 2, 1942

Saw her again in about 10 min. in one of high branches of alder. Sat & cleaned beak, ruffled wings, & fanned tail. Moved down lower in alder & repeated process. Finally, Dedge? nest; fed young; did not observed how many times each fed; noticed that white breast feathers seemed a little ruffled & that, as she jammed beak down into young's mouth, the beak was slightly opened for a second at the base, which I could see & then closed. Moved on to nest, facing first SE & then NE, i.e. towards nest with some flapping of wings. On nest for a few seconds then off & then on again. Gray squirrel appeared on fallen log below nest, moved Hummingbird off nest & hovered around him a few seconds, apparently not disturbing him, because then she flew into alder above squirrel & cleaned her beak & preened her feathers for a while. Moved into Oak S.E. of nest tree & preened & scratched some more. Kept this up for quite a few min; carefully extending wing & running beak down it; then turning

27. Redon - 1942

47

Calliope Hummingbird

E. Fork Shup Creek, 5500 ft, Kings R Canyon, Fresno Co., Calif.

June 2, 1942

neck & and running back down her back; bending neck & preening breast feathers. Scratched vigorously with both beak & foot. (Presence of ectoparasites?) Would look around nervously but attacked upon herself with that long beak. Perched about 6 ft from ground ~~at~~ about one inch from the end of a small bare twig. Twig about a foot from tree trunk & about 10 ft. from nest. Flew then into ^{low} branch of nest tree & then, after hovering¹ about for a second, mounted nest (flew in) facing E. She had been off nest about 2 min but had been within sight of it all this time & had been preening & scratching. On nest 2 minutes & then off with NW sweep described & drawn previously. Reappeared about 10 minutes later in small Oak S.E. of nest. She preened for a while; in Alder etc. hovered around, disappeared for a few seconds & then perched on nest edge & fed young. Slid onto nest so facing S.E. & whirled NE wings, fluttering, fluttering. No sun here yet, today - cloudy. Left nest & flew NW again.



M. R. Brown, 1942

Calliope Hummingbird

E. Fork Sheep Creek, 5500ft, Kings R. Canyon, Fresno Co, CalifJune 2, 1942

Reappeared shortly; preened feathers a little ^{in air} & flew
 out nest ^{faced NE.}; absence only of about 2 minutes this
 time. Remained on nest 5 minutes & then flew
 off in same arc described & diagramed above.
 Was gone for almost 15 min. Seen to arrive in
 limb of oak SE of nest tree - Sat & preened &
 looked around; fluttered wings & fanned tail.
 Heard a faint squeak & the mother flew straight way
 to nest edge & fed young. Total of about 4 or 5 down-
 ward jabs. Laid on nest facing a little S of East -
 Sun came out for a while & again disappeared
 under clouds for a second - When wind blows
 she jerks her neck & shakes her head -
 Flew off at approach of H. Fishers & B. Storer. at
 about 10:20. - Reappeared at about 10:30 from S.W. &
 Sat on nest. -

Water Ouzel -

May 22, 1942 - W. Fork Sheep's Creek, Kings R. Canyon, Fresno Co., Calif.

One bird seen flying about region of swift flowing water & falls. Landed on lichen-covered rock & seen with green protruding from mouth. General color is sooty gray tail short, body heavy, wings long & seem quite powerful. Wades in water edge & along rocks head bobbing down vigorously all the time. Flies short distances & then lands in rocks farther down. Actually went into water ^{walking} ^{from the} edge which was flowing rapidly & foam-covered; did not stay long & flew out. Here again received impression that wings long & fairly broad. While the one we were watching was downstream, we saw another one fly up toward the 1st fall above the bridge dam & beyond some rocks projecting from edge to the left (across falls). The other bird (one we had been watching) ~~was~~ arose in flight, circled & followed. Shortly after ~~the other~~ one flew down stream & out of sight; the other followed, but stopped & began working its way downstream. Then, disappeared. One appeared about 5 mi. later with something green in its mouth & flew back behind fall - same place as before. Then flew out & down stream out of sight.

M. Redon

Sparrow Hawk -

May 21, 1942 - End of Old Road, Kings Canyon, Fresno Co., Calif.

I seen flying overhead and land at very top of an Incense Cedar; flew off, and toward ~~yellow~~ pine ^{very} at top of which was another Sparrow Hawk. Two met, & both flew to ^{high branch of a} top of Sugar Pine; one near the other. Then one (male?), which appeared the larger, flew downward & the other flew off in some other direction (East?).

